The Biopsychosociospiritual Model in Problematic Substance Use Treatment:

A critique of published work to date supporting its application in practice, and examination of the evidence-based practice role in changing the treatment approach.

P K SHANMUGAM

PhD 2020

The Biopsychosociospiritual Model in Problematic Substance Use Treatment:

A critique of published work to date supporting its application in practice, and examination of the evidence-based practice role in changing the treatment approach.

PREM KUMAR SHANMUGAM

A thesis submitted in partial fulfillment of the requirements of

Manchester Metropolitan University

for the degree of Doctorate of Philosophy (PhD)

by Publication Work

(Route Two)

2020

Table of Contents

Acknowledgements

This research degree has been one of the best academic journeys I have experienced. I must admit there were moments when I thought I would not be able to continue but I have had some truly amazing people in my life who kept me going. First and foremost, I would like very much to thank my supervisor, Dr Lucy Webb who was patient enough to guide me throughout this research. Dr Webb was inspirational in sharing her knowledge and expertise in ensuring this research was possible. I would like to thank the staff and team at Solace Sabah Retreat in Malaysia for sharing their experience working in the treatment centre and also the clients who were kind enough to disclose their struggles battling substance use. Without their willingness to share their experiences, the publications reviewed for this research and this research degree would not have been possible. I am blessed to have a very supportive family who has always stood by me. I am ever indebted to my wife Elis, parents Shanmugam and Keseva Kumari who never doubted me from young and constantly showered me with an abundance of love. My sister, Sharmini, who is the next most important person in my life whom I remain indebted to for life, Siva my brother in law and their angelic children.

List of published work:

Publication one: Shanmugam, P.K. & Winslow, M. (2013) Integrated Psychosocial Treatment Programme for Substance Abusers: Relapse Prevention and Social Anxiety Diminution: A Systematic Review of Published Literature. *Journal of Addiction Research Therapy.* DOI: 10.4172/2155-6105.S7-004

Publication two: Shanmugam, P.K. (2015). The Disease Model Examined, *Intervene, The Recovery Magazine, 155,* 50-51.

Publication three: Shanmugam, P. K. (2015). Theories of substance dependency, Counselling. *Journal of Counselling Australia*, 15 (2), 17-19.

Publication four: Shanmugam, P. K., & Winslow, M. (2012). Evaluation of the Facilitated In-house Recovery Education (FIRE) Treatment Programme for Substance Abusers. *Journal of Counselling Australia*, 12 (3), 12-15.

Publication five: Shanmugam, P.K. (2015) The Family – Responding to a Disease of Emotions. *Intervene Magazine*.

Publication six: Workbook - Shanmugam, P. K. (2016). Addiction: *A Family Disease. A book for expression by colours on the concepts of The Family Disease*. ISBN: 9781365676208. Gillin Printers: Kuala Lumpur, Malaysia.

Publication seven: Shanmugam, P. K. (2020). Psychoeducation impact for family members of substance misusers: use of the Kirkpatrick model to evaluate the workbook 'Addiction: A Family Disease'. *Journal of Substance Use,* DOI: 10.1080/14659891.2020.1807632

Publication eight: Shanmugam, P. K. (2019). Exploring trends and challenges from mandated treatment to voluntary treatment outcomes in addiction treatment in Malaysia: moving towards a person-centred service provision? *Journal of Substance Use*, DOI: 10.1080/14659891.2019.1664669

Abstract

This body of work demonstrates a contribution to practice evidence that aims to reach practitioners and frontline services in support of the delivery of evidence-based practice. It represents the process of the exchange of evidence between innovative service delivery and dissemination of evidence to practitioners for improving treatment. Therefore, it serves as the linkage between theory, practice, practice innovation and implementation, aiming for dissemination to a practitioner readership and public understanding in SE Asia and Oceania.

Substance dependence treatment in Malaysia currently adopts Western bio-medical sciences, but often using evidence not culturally sensitive to non-Western settings. Therefore, the development of an integrated treatment programme in Malaysia using the biopsychosociospiritual model required development and evaluation, and delivery in formats applicable to the cultural needs of this global region. This body of work illustrates the process of appraising existing evidence for practice, applying and adapting treatment practice, and developing and evaluating culturally sensitive innovative tools and approaches applicable to low and middle-income countries (LMICs). Its contribution to knowledge is demonstrating the adaptation of practice evidence from Western culture to LMICs, and filling a gap in evidence for how psychosociospiritual approaches to treatment in substance use can be adapted to cultures where family connections and spirituality may be more significant than in many Western settings.

Chapter 1: Introduction and background to the body of work

I began my career working in a community service centre in Singapore as an officer managing inquiries from family members seeking help. I was exposed to multivariate community-based problems and discovered that a majority had some kind of problematic substance use at the core of the issue. Very often we would be treating the presenting problems but soon realized the same people kept returning for help.

I realized that we were addressing the symptoms but not the real problem. Common issues identified were financial, domestic violence, educational, marital, medical or psychiatric and employment. We did, of course, identify those with problem substance use and referred them to appropriate services but relapse rates were high and constant. Of particular note among Malaysian clients was the significance of family relationships and the psychosociospiritual element of relating.

Problematic substance use has its diagnostic features, such as aspects of 'tolerance, withdrawal, repeated unsuccessful attempts to cut back or quit, and impairment in normal functioning' (American Psychiatric Association, 2013, p.796). Although this is the bio-medical model of addiction, I needed to appreciate the psychosociospiritual elements, particularly the influences of family and significant others in the individual's life. Cox and Webb (2015) suggested that evidence-based treatment approaches for problematic substance use are based on Western cultures and I realize in Low and Middle Income Countries (LMICs) like Malaysia, practitioners were largely

employing these approaches. My experience working with the local community made me realize if we intend to successfully incorporate evidenced interventions, they need to be customized to the specific psychosocial and spiritual needs of the population.

Abdullah (2005) referred to addiction as a harmful disease which alters the person physically, mentally and morally. Not only does it have an adverse effect on the individual but also the family and social structure. Relationships help either to continue the use of the substances or encourage change and help-seeking behaviour (Miller & Carroll, 2006). Salem and Ali (2008) describe addiction as a complex disorder to treat due to the psychological, social and spiritual elements, and a holistic approach is suggested for better treatment outcomes.

Methods employed to manage problematic substance use in Europe have progressed from criminalization to harm reduction to rehabilitation in recognition of the wider personal and social contexts of addictive behaviour (Mold & Berridge, 2010). Treatment for problem substance use is expected to have positive outcomes of sustained reductions in substance use, improved personal health and social functioning (McLellan, et al., 2005). More recently, the emergence of recovery and recovery capital has focused more attention on building resilience within individuals and communities to reduce relapse (Best & Lubman, 2012), and valuing the spiritual elements that give meaning to life (Laudet, Morgen & White, 2006). This recognition has resulted in service provision that merges the medical, psychosocial and existential (biopsychosociospiritual) into a holistic treatment approach. It is also increasingly

recognized that family members are affected by a loved one's substance use, and have a role in the treatment process (Copello, Velleman & Templeton, 2005).

While the bio-medical evidence of effectiveness is on the whole globally generalizable, intervention evidence generated in Western contexts of the psychosocial and spiritual elements may not represent global socio-cultural contexts and are less likely to be culturally transferable. There appears yet to be a systematic treatment approach which incorporates the family as a critical component. This is particularly relevant to LMICs where the family is often a more dominant psychosocial component than in the West. This means that psychosociospiritual treatment in LMICs such as Malaysia requires context-specific evidence to claim its evidenced credentials.

This thesis aims to provide an analysis of my body of work for evidence in support of applying an integrated biopsychosociospiritual approach to problematic substance use treatment which is culturally specific to the population being treated, in this case, Malaysia and culturally similar populations. At the same time, the thesis will examine the evidence for practice applicable to LMICs while identifying the need for an integrated treatment approach to achieve holistic and treatment-positive outcomes.

The appraisal will take into account the need for dissemination of evidence to specifically targeted audiences. Applied science requires that evidence reaches practice, and evidence for practice requires not just the production of evidence but its

dissemination and application. Therefore, this body of work aims to address the theory-practice gap and this element will be considered in this thesis.

1.1 Research objectives

The objectives of this thesis are to:

1) Explore the evidence for the effectiveness of psychosociospiritual approaches in a non-Western context.

2) Identify gaps in the evidence in support of culturally sensitive psychosociospiritual approaches and indicate areas for future research.

3) Provide evidence for the effectiveness of the application of culturally adapted approaches to the biopsychosociospiritual model that accommodate family and spiritual factors.

1.2 Problematic substance use as a holistic issue

Problematic substance use has been referred to as a result of character defects or due to sins committed by the affected person (White, 1998), and a disease of the will or the human spirit (Lefever, 2000). However, Weinberg (2002) suggested the importance of the substance-dependent person's environment, moving away from analyzing the psychopathology of the person. This understanding of the influence of the environment led to the introduction of the more holistic biopsychosociospiritual model of problem substance use (Weinberg, 2002). Theorists and treatment professionals

better accepted this model as it combined the various aspects of problem substance use and the multiple factors influencing behaviour which one single theory failed to do (Skewes & Gonzalez, 2013). Stevens and Smith (2005) explained problematic substance use as a multifaceted condition with mechanisms in society being key to treatment and recovery, and Salem and Ali (2008) state that addiction is influenced by psychological, social and spiritual factors. Therefore, multi-factor explanations indicate that a successful approach would need to be holistic.

Miller and Carroll (2006) propose an integrated treatment approach that addresses both the substance-dependent person and the surrounding environment. Family and social factors are suggested to have a positive influence and outcomes of treatment (Miller & Carroll, 2006). I learned from my work that treating the client and allowing them to return home to an untreated environment may not be sufficient to address the problems. This practice experience evidences the need to identify an integrated treatment approach taking into consideration aspects of the values and culture within the society and the family.

1.3 Psychosocial influences of substance use

Miller and Carroll (2006) discussed the role that family and significant others play in influencing recovery, while Copello, Velleman and Templeton (2005) propose that family members play a critical role in providing psychosocial influence, thus affirming the need for treatment approaches to be culture-specific. Differences in family cultures may mean that what works in Western families may not apply within a non-Western context.

It is suggested that psychosocial factors tend to be overlooked in a 'scientocentric' adherence to evidence (Berg, 2019), producing an evidence-for-practice bottleneck in which the requirement for practitioners to only deliver evidence-based practice reduces practice innovation and ignores culture, patient characteristics and choices. This suggests that the individual client's psychosocial needs may not be addressed when selecting the treatment approach, as treatments become standardized, and service providers adhere to only accepted and evidenced approaches to demonstrate the facility's excellence. This is most evident in the LMICs where treatment approaches delivered often by private organisations are based on Western approaches which use evidenced outcomes applicable to Western society.

A greater concern for human rights in mental health may have been a key driver for the growth of the recovery concept in Western health delivery. Substance use treatment providers now focus on goals and aspirations as a result of recovery-oriented

treatment (Neale, et al., 2014). The Betty Ford Institute Panel describes recovery as a voluntary lifestyle based on sobriety, health and citizenship (McLellan, 2010). Groshkova, Best and White (2013) state that quality of life and the concepts of recovery capital (intra- and interpersonal assets) are becoming more popular as a point of focus for policymakers. Practitioners posit that recovery should ideally include relationship-building, emotional stability, self-care, involvement in domestic matters, community lifestyle, and focusing on health and wellbeing (McLellan et al. 2005; Neale, Pickering & Nettleton, 2012). Additionally, Salem and Ali (2008) proposed focusing on psychological and spiritual factors. In other words, they all propose multiple intervention goals.

As evidenced by the literature and my own practice experience, I suggest a biopsychosociospiritual model which is culture-specific as a more appropriate approach in ensuring holistic treatment. Policymakers and clinical researchers discuss the medical or biological model (Miller & Carroll, 2006), and the psychological, social and spiritual model (Salem & Ali, 2008) along with quality of life (Cloud & Granfield, 2008; Groshkova, et al. 2013; McLellan, 2010; Scheyett, et al., 2013) as being critical in achieving recovery from problematic substance use. Additionally, Neale et al. (2012) and Hari (2015) stress the importance of relationship-building and meeting psychosocial needs to achieve recovery and quality of life. I submit that, to attain sustained recovery from problematic substance use, treatment should include family and relationship components that influence substance use and aid recovery, as well as meeting the biological/medical and psychological needs of the individual.

However, the application of evidence-based treatment approaches from the Western regions may not be transferable to the LMICs and non-Western regions. Cultures influencing family roles and requirements need to be taken into consideration to ensure positive treatment outcomes employing a more culture-specific treatment approach.

1.3.1 The cultural context

Psychosocial treatment approaches are now recommended in the UK (Clinical Guidelines on Drug Misuse and Dependence Update 2017 Independent Expert Working Group, 2017). Additionally, the World Health Organization recommends that both pharmacological and psychosocial approaches should be available to meet individual needs (World Health Organization, 2008). Dell, Seguin and Hopkins, et al. (2011) stress the importance of cultural interventions which address wellness in a holistic sense, rather than the Western bio-medical model. At the same time, there is the worry that Western psychiatric evidence is being imposed on LMICs that does not represent specific cultural differences in family and socio-spiritual health (Mills, 2014).

Asian families are largely collectivist and family values such as duty, tolerance and respect for elders is a critical component to appreciate when working with these cultures (Tseng, 2004). Traditional beliefs about mental illness and social support systems between the Asian and Western communities may differ, and this has an impact when trying to implement the Western treatment model (Tseng, 2004). Ibrahim

and Kumar (2009) identify the particular lack of empathy for people with problematic substance use as a barrier to behaviour change within the Malaysian community. They suggested that to reduce relapse rates post-treatment, family relationships and support from the community are a key area of focus. A recent study by Baharudin et al. (2019) suggests that Malaysian families may benefit from specifically-targeted support when a member has problem substance use.

1.3.2 Spiritual context

Cook (2004) highlighted how the addiction field has been unable to provide a unified definition of spirituality. Kaskutas, Turk, Bond and colleagues (2003) suggest how this understanding has led to the two different explanations of spirituality: theistic view where there is a firm belief in God, and the non-theistic view focusing more on inner strengths and moral values. White (1992), an influential leader of the personal recovery approach in the United States, takes a non-theistic view of spirituality as a heightened state of perception or awareness and how that experience connects, empowers, heals or liberates a person. However, arguably, spirituality in problematic substance use is not so easily exclusive of religiosity. Miller (2013) points out that religious involvement is correlated with a lowered risk of substance use and related disorders, and describes spiritual-religious concepts like forgiveness and participating in religion as associated with physical and mental well-being. White and Laudet (2006) illustrate spirituality as emerging from the religious concepts and expanding into

providing a sense of purpose and meaning in one's life, so expanding from theistic to include non-theistic spirituality.

Psychotherapists specializing in alcohol dependence were the first to employ theology in therapy while slowly introducing the psychological techniques (White & Laudet, 2006). White and Kurtz (2005) explain how Alcoholics Anonymous (AA), which has its origins in religious roots, succeeded in distinguishing itself from religion, presenting itself in an explicitly secular way. Miller (2013) explains AA as an 'unapologetically spiritual program, through which spiritual growth is meant to displace alcohol use.' (p. 1258). Studies on the outcomes of involvement in AA programmes have revealed a relationship between being abstinent from alcohol and exercising spiritual values such as forgiveness, maintaining a purpose in life throughout recovery and having a close association with long-term sobriety (Miller, 2013). Christo and Franey (1995) on the other hand, mentioned how past religious beliefs or spirituality are not necessarily essential in attaining spirituality in recovery. This may be because non-theistic spirituality is more acceptable to an increasingly secular society, especially in the West.

My exposure working with Malaysian family members has brought me to believe that healthy relationships, social support and shared values are essential elements in developing an integrated treatment approach that incorporates both psychosocial and spiritual elements. Ibrahim and Kumar (2009), in their survey with 400 substance-dependent people in Malaysia, found that community and social support is a key

element in reducing relapse post-treatment. Adam, Ahmad and Fatah (2011) claim that many treatment approaches in Malaysia have been sub-optimally successful and this has encouraged alternative modalities employing an Islamic approach with the aid of prayers, remembrance, repentance and religious classes, leading to 70% to 90% successful treatment rates in Malaysia.

1.3.3 Family and problematic substance use

McCrady, Epstein and Sell (2003) suggest that there are three types of coping responses identified in families experiencing problematic substance use; *tolerant coping,* accepting the substance use; *engaged* coping, where attempts are made continuously to change addictive behaviour; *withdrawal* coping where family members choose to ignore or leave the individual and focus on themselves. The responses vary in their impact on the substance use or family by either facilitating change or encouraging adaptive behaviour where problem use persists.

Orford et al. (2013) make a clear distinction between the phenomenon of addiction and the impact it has on family members and the social consequences, particularly the way family members are affected. Azmi, Hussin, Ishak et al. (2018) claim that psychosocial factors, mainly family stressors, are a major cause of post-treatment relapse among Malaysians. Chen (2006) also found that Malaysians in recovery from substance dependency manage stressors better with support from the community, peers in recovery, family and spirituality-based programmes.

Therefore, to successfully treat problematic substance use in a Malaysian context, a holistic treatment approach integrating culturally sensitive family therapy and substance use treatment is explored in this thesis. The following discussion illustrates this integrated approach.

The body of work presented here illustrates an exploration of theories of addiction and substance use treatment approaches that support integrated treatment, and a growing realization of an evidence-for-practice gap in support of SE Asian treatment contexts. My early work (publications 1, 2 and 3) focuses on biomedical and psychological theories of addiction and substance use treatment, using Western theories and evidence to promote uptake of evidence-based practice in SE Asia. With experience from practice in this cultural context, the recognition of the need to address family dynamics and spiritual values promoted a need to apply and evaluate integrated approaches (publications 4 and 5), and devise culturally appropriate means of working with families (publications 6 and 7). Consideration of cultural sensitivity and the need for Malaysia to develop its own underpinning evidence led to an investigation of SE Asian evidence for practice and a call for evidence development within the history of Malaysian drug policy (publication 8). The following chapter gives a critical account of the publications with regards to their contribution to knowledge and scholarship.

Chapter 2: Publications and a critical account of their contribution to knowledge and scholarship

2.1 Examining the evidence of integrated treatment approaches

Publication one.

In the first of my presented published papers, my curiosity and the keen interest in developing an integrated treatment programme led me to carry out a systematic review (SR) to identify evidence for integrated psychosocial treatment to treat social anxiety and avoid relapses for people suffering from problematic substance use. Though findings from the review revealed no specific integrated treatment approach, I did identify helpful evidence about the range of treatment approaches, the diversified methodologies employed, assessment tools and the gaps in the research.

The findings from the review are limited due to the rigid inclusion and exclusion criteria imposed. As observed in the critique in chapter 3, the SR method, though acclaimed to be robust and replicable, is a reductionist method where evidence is narrowly focused and may not apply to the problem within the practice setting. Though the rise in SRs aims to find solutions for practice, they tend to apply to medicine rather than psychosocial approaches that require more information on the context. Evidence from SRs tends to apply to patient groups regardless of context, while psychosocial interventions require more evidence on the setting, psychosocial needs of clients and skills levels of staff delivering the interventions. My motivation to conduct the SR was to

develop an integrated treatment approach based on academic and professional experience for people with problematic substance use mainly within the SE Asian population. The SR could not establish an integrated treatment programme for a Malaysian population but did establish that there is a dearth of evidence that is culturally applicable to Malaysia. It can also be claimed that this lack of evidence demonstrates the reliance that LMICs may have on Western-based evidence. This illustrates the need for locally-based production of practice evidence for psychosocial and spiritual elements of treatment that can account for cultural diversity.

Within the psychosocial context, specific attention could have been given to the psychosociocultural variables influencing the outcomes of treatment. Yoshimasu (2013) discusses three significant areas associated with substance-related disorders and psychosocial factors, mainly religious/spiritual, job-related and clinical factors affecting the quality of life of substance-dependent individuals. Cultural and ethnic specifications affect clinical and social features found among people with substance-related disorders (Hankerson & Weissman, 2012; Jesse, Graham & Swanson, 2006). From a practitioner's perspective, these influences appear to have an impact within the clinical environment, and a dominant disease model may limit the available evidence for psychosocial influences.

2.1.1 Impact of the publication

There is growing interest as referenced by the World Health Organisation and other international researchers on the treatment approaches employed in non-Western contexts (Shanmugam, 2019). This gap in the evidence-based publication in Malaysia drove the desire to work on publication eight, focused on how the various substance use treatment approaches in Malaysia have evolved. The intention is to establish treatment programmes which would be able to meet specific psychosocial and spiritual needs of the non-Western population.

Publication One

Shanmugam, P.K. & Winslow, M. (2013) Integrated Psychosocial Treatment Programme for Substance Abusers: Relapse Prevention and Social Anxiety Diminution: A Systematic Review of Published Literature. *Journal of Addiction Research Therapy.* DOI: 10.4172/2155-6105.S7-004

58 reads, 2 citations and research interest score of 1.4 on Research Gate.

4 citations on Google Scholar

121 views and 76 downloads on Academia.edu

Addiction
Research & Therapy

Shanmugam and Winslow, J Addict Res Ther 2013, S7
http://dx.doi.org/10.4172/2155-6105.S7-004

Review Article Open Access

Integrated Psychosocial Treatment Programme for Substance Abusers: Relapse Prevention and Social Anxiety Diminution: A systematic Review of Published Literature

Prem Kumar Shanmugam[1]* and Rasaiah Munidasa Winslow[2]

[1]*Programme and Clinical Consultant, The Cabin Chiang Mai, Singapore*
[2]*Department of Psychological Medicine, National University Singapore, Singapore*

Abstract

This review presents a systematic evaluation of the literature of psychosocial treatment programmes for substance abusers published from 1995 to 2010. It identifies the active ingredients of treatment and evaluation of outcomes. For the purpose of the study, two questions were posed: (i) Do psychosocial treatment programmes prevent relapses? (ii) Do psychosocial treatment programmes prevent relapses and reduce social anxiety? A systematic and comprehensive search was conducted by using Econ Lit with EBSCOHOST, ERIC, PsycARTICLES, PSYCCRITIQUES and PsycINFO. Initial findings revealed only three directly related articles for the last 10 years and extending the search to 1995 provided for a more concise pool of studies. Substance dependency is a specialized area of study and it was necessary to justify the search terminologies. To derive a comprehensive and substantive review, it was necessary to include and also exclude certain components from the search further. This review presents the findings and a summary of psychosocial treatment programmes based on the research questions posed.

Keywords: Social anxiety; Psychosocial treatment; Drug relapse prevention; Co-existing problems; Comorbidity; Drug abuse; Substance use; Substance dependence, Intervention; Treatment outcome

Operational Definitions of Key Terms

For ease of understanding this review, specific terms are operationally defined below: Substance dependence is pathological and unintended while substance abuse is intentional and "conscious" [1]. The dependency is a relapsing disorder caused by alcohol, opioids and other psychoactive substances [2]. Relapse, is a failure in the process to remain abstinent from the substance or the return to a pre-abstinence level of substance dependency/abuse by the individual [3]. Social anxiety is about emotional anxiety or discomfort in social situations or feelings of being evaluated and scrutinized by other people (Avants et al.) [4]. Psychosocial treatment programmes incorporating skills training, psychoeducation, structured group activities and a broad range of non-pharmacological interventions - referred to as treatment with no drug prescriptions - are meant to address the multitude of issues in substance dependency [5]. Psychosocial treatment programmes do not include solely focused forms of therapy such as Cognitive Behavioural Therapy, Solution Focused Therapy or Rational Emotive Therapy and other forms of Humanistic or Behavioural Therapy. Co-morbidity for the purpose of this study refers to the existence of other disorder/ disorders in addition to the substance use disorder.

Background

Introduction

There is substantial amount of literature on the treatment of substance abuse disorders and co-morbidity [6-8] available. However, the treatment models employed may not be directly applicable for persons diagnosed with co-morbidities such as social anxiety and substance dependency [8]. There does not appear to be an integrated psychosocial treatment programme for substance abusers to prevent relapses and to reduce social anxiety.

The National Epidemiologic Survey on Alcohol and Related Conditions (NESARC) reported form a survey (N = 43,093) that there is a high risk of co-occurring anxiety and substance use disorders (Smith and Book [9]). The results further revealed that anxiety disorders were more related to substance dependence (odds ration [OR] = 3.0 – 6.0) than substance abuse (OR = 1.2-1.6) [9]. Lubman et al. [10] discuss the co-morbidity's negative impact on quality of life while [11] reiterate that prevalence of co-morbidity causes serious repercussions.

Substance abuse disorder is becoming a serious problem in many parts of the world. Fifty three percent of people with substance use disorders (other than alcohol) suffer from at least one other mental disorder [2]. In the United States, anxiety and substance use disorders are some of the most common psychiatric problems with lifetime rates of 28.8% and 14.6% respectively [9]. Stressful life events have been proposed as contributing factors towards the acceleration of substance use [12]. The belief that drugs can relieve stress [13] indirectly motivates and nurtures the drug seeking behavior.

Existence of the problem globally

Co-morbid social anxiety and substance abuse disorders are prevalent around the world – An estimated 25% substance abusers in inpatient treatment settings in the United States [14,15] and Brazil [14,16] are diagnosed with specific co-morbidity. In New Zealand, 31% of substance abusers are treated as outpatients [14,17] while 23.3% outpatients in the United Sates [14,18] are diagnosed with co-morbid disorders. On the other hand, there does not seem to be any form of systematic review conducted or published particularly on social anxiety and relapse prevention for substance abuse disorders. Book et al. [14] further affirm this in their report that there are few studies which discuss the relationship between social anxiety and substance abuse.

***Corresponding author:** Dr. Prem Kumar Shanmugam, Programme and Clinical Consultant, Masters Counselling, The Cabin Chiang Mai, Singapore, Tel: +6593393328; E-mail: premkumar@thecabinchiangmai.com

Received December 09, 2012; **Accepted** February 22, 2013; **Published** February 27, 2013

Citation: Shanmugam PK, Winslow RM (2013) Integrated Psychosocial Treatment Programme for Substance Abusers: Relapse Prevention and Social Anxiety Diminution: A systematic Review of Published Literature. J Addict Res Ther S7: 004. doi:10.4172/2155-6105.S7-004

Social anxiety

Social anxiety is one of many distinctive feature of substance dependants who tend to view themselves as: being chastised by others, they fear rejection and focus on internal representations of 'self viewed by others'; they are vulnerable to the influence of dominating members of their social network [4,19], 'fear of scrutiny in social situations'[14] and lack social skills, thus bringing much distress upon themselves [4]. Treatment for this group of people causes much challenge as the co-morbidity itself poses a major hindrance to treatment. This is because substance abusers who have an affective or anxiety disorder may not be diagnosed with mental illnesses unless they seek treatment for substance abuse disorders [8]. In 75% of cases, anxiety disorders predate substance use disorders [9]. Treating substance abuse alone does not help as substance abuse is 'episodic and recurrent." [8]. Therefore treatment needs to be planned accordingly to treat the co-morbidity as well.

Relapse

Relapse is an obstacle in drug treatment [20] thus avoiding the relapse occurring is an important component in treating substance dependence. Marlatt and Gordon [21] explain relapse as "a violation with a single event on the basis of complete abstinence from the abuser's drug of choice". One of the main concerns with treatment programmes is the relapse rate and this was observed at the DRCs. The possible reasons for the staggeringly high relapse rates could be due to:

1. The single treatment modality [22] which emphasizes more on the problem and stigma of addiction.
2. The absence of support groups to enhance, strengthen emotional stability and to provide appropriate skills to live a drug free life which is the concept of psychosocial treatment for substance dependence.
3. Stigma created by the treatment caused by the punitive approach in treatment and social anxiety of the addicts.

Purpose and research questions

This review presents a systematic evaluation of the literature of psychosocial treatment programme for substance abusers. The researcher feels there is a need for a psychosocial treatment programme for substance abusers to reduce relapse and to manage social anxiety.

For the purpose of this study two questions were posed:

1. How do psychosocial treatments programmes impact relapse rates?
2. How do psychosocial treatment programmes impact relapses and reduce social anxiety?

There appears to be no psychosocial treatment programmes existing to prevent relapses and reduce social anxiety. For the purpose of this review, the researcher combined data from various studies for both the dependent variables (relapse prevention and social anxiety diminution) in psychosocial treatment programmes. The researcher noted further that in order to obtain representable data, it was necessary to review and combine various measures from a combination of studies. The process of excluding and including data as such may lead to losing crucial information [23].

Methods

A systematic and comprehensive search was conducted by using Econ Lit with EBSCOHost, ERIC, PsycARTICLES, PSYCCRITIQUES and PsycINFO. The computerized search was initiated on studies conducted in the English language for the period from 1995 to 2010. Initial findings revealed only three directly related articles for the last 10 years and extending the search to 1995 provided for a more concise pool of studies. To optimize results of the search, multiple search terminologies were applied with the application of Boolean operators.

The initial search items employed were "addiction" OR "substance*" AND 'treatment', 'substance*' AND 'relapse prevention', 'substance*' OR ('relapse*' And 'social anxiety'), 'mental health' OR 'addiction'. An independent search was carried out as well with key terms such as 'co-morbid disorders', 'co-existing', 'illnesses', 'addiction AND stress' OR 'addiction AND anxiety'. The search was then extended to MedlinePlus and PubMed with the application of similar search terminologies. The bibliographies of the selected articles identified were manually searched further for more relevant studies.

After numerous attempts, the final search items decided were: (substance abuse and psychosocial treatment) AND (addiction) and (relapse reduc* or social anxiety) not (smoking or adolescent or cigarette).

Inclusion Criteria

This is a specialized area of study and it was necessary to justify the search terminologies and narrow down the focus of the review. As all various forms of substance dependency (i.e. heroin, cocaine or marijuana) and its consequences are similar as defined in the Diagnostic and Statistical Manual of Mental Disorders [24], all forms of addictive substance were included [(substance abuse AND psychosocial treatment) AND (addiction)]. There was no integrated form of a psychosocial treatment programme, therefore, all various components of the psychosocial treatment programme: Group Motivational Interviewing [25], Supportive Expressive Dynamic Therapy [26], Psychosocial Treatment on Cocaine Addicts [27] or Group Drug Counselling [28] were identified manually from several individual articles. The influence of treatment programmes on the dependent variables, relapse prevention, (which is the core focus of all treatment programmes) and social anxiety [25,27,29]. Moos [30] were also established in various articles [(relapse reduc* OR social anxiety)]. The researcher noted that the studies identified did not contain an integrated psychosocial treatment programme incorporating both the dependant variables - relapse prevention and diminution of social anxiety.

Exclusion Criteria

In order to derive a comprehensive and substantive review, the components of the search are required to be specific. As there are numerous studies on substances abused, smoking, chewing tobacco and other forms of behavioural addictions were excluded [NOT (smoking OR adolescent OR cigarette)] from the search. To achieve better generalizability of the findings to specific population, the targeted population was only adults while adolescents/teenagers were excluded from the review. Although, psychosocial treatment programmes incorporate various other forms of treatment, it was important to exclude unrelated treatments (pharmacological treatment and various forms of focused therapy). Research questions for the purpose of this study included relapse rates and social anxiety reduction. Therefore, other variables (other forms of co-morbidity besides anxiety) were not given priority and excluded from the selected articles.

Results

After conducting an extensive coverage and a synthesized review of

the literature, 19 studies in regards to substance abuse and psychosocial treatment were shortlisted as the most relevant (Table 1). The abstracts and titles of each article were carefully evaluated in order to meet the inclusion and exclusion criteria. The researcher chose to examine the reference lists from various relevant published articles as well.

From the 19 studies, seven studies incorporating psychosocial treatment programmes were identified out of which only one comprised an integrated psychosocial treatment programme (Crits-Cristoph et al.) [27]. This form of integrated treatment not only focused on relapse reduction but also on other associated problems such as

	Author/s	Type of treatment	Methodology	Contribution
1.	Abdullah [55]	Historical analysis	Historical analysis, literature review (Amphetamine-type stimulants (ATS))	Meaning of drug use has changed over time and context depending on socio political surroundings. Overwhelming societal concern that has created an ideology of drug use as a moral 'problem'. [Drugs reported were limited to amphetamine-type stimulants (ATS)]
2.	al'Absi and Mustafa [56]	Neurobiology of stress addiction and the psychosocial processes	Academic text with overlapping chapter reviews	Abusing drugs and experiences of stress act on similar areas in the brain and involve overlapping neuronal mechanisms
3.	Ana et al. [25]	Group Motivational Interviewing (GMI) and Therapist Attention Activity Control Group (TAACG)	Quasi-experiment	Patients participated in GMI during inpatient treatment were more frequent in after care treatment and consumed less alcohol in follow up compared to attendees of TAACG
4.	Avants et al. [4]	Socially anxious drug dependents in low intensity and high intensity psychosocial treatment programmes (with cocaine).	Quasi –experiment	Socially anxious methadone maintained (treatment for cocaine dependence) patients who stay clean in treatment manage to be abstinent post treatment longer when in low intensity treatment programmes. They also display less HIV risk taking behaviours.
5.	Barber et al. [26]	Supportive Expressive Dynamic Therapy (SET) and Individual Drug Counselling (IDC) (with cocaine)	Quasi-experiment	SET and high levels of IDC had less predicted drug use compared to SET alone. Straightforward dug counselling is better predictor of outcome compared to making addicts understand the cause of dependency.
6.	Book et al. [14]	Social anxiety and participation in group setting treatment	Experiment	Socially anxious substance abusers are less willing to attend self help groups, present with more psychopathology then non-socially anxious substance abusers.
7.	Chong and Lopez [41]	Social network, family, peer support and psychosocial functioning	Correlational study	Social support and family involvement during treatment influences outcome of treatment to improved psychosocial functioning
8.	Crits-Cristoph et al. [27]	Psychosocial treatment with Cognitive Behavioral Therapy (CBT), Supportive Expressive Therapy (SET), Individual Drug counseling (IDC) and Group Drug Counselling (GDC) on psychosocial and other addiction associated problems (with cocaine)	Quasi-experiment	No significant differences between psychiatric symptoms, employment, medical, legal, family, social, interpersonal or alcohol consumption problems. Efficacy of IDC does not extend to treatment of other associated addiction –related issues.
9.	Crits-Cristoph et al. [29]	Psychosocial treatment - 12 step philosophy as mediator of outcome with IDC+ GDC and CBT as mediator of outcome with IDC+GDC (with cocaine)	Quasi-experiment	12 step beliefs incorporated with IDC+GDC produces better treatment outcome compared to CBT with IDC+GD
10.	Crits-Cristoph et al. [34]	Supportive Expressive Dynamic Therapy (SET) and Individual Drug Counselling (IDC)	Quasi-experiment	SET and high levels of IDC had less predicted drug use compared to SET alone.
11.	False-Stewart and Bate [57]	Neuropsychological tests on participants from Outpatient Treatment Programme and the Therapeutic Community	Quasi-experiment	Education, years of alcohol use, number of substance use dependence disorders, percentage of days of heavy drinking in previous year, depression, familial alcoholism, pre-morbid level of cognitive functioning, liver functioning and previous head injuries identified as risk factors for latent cognitive abilities.
12.	Hesse [23]	Systematic search of MedLine and PsychInfo	Review	Psychotherapeutic treatment for co-morbid depression and substance abuse though promising does not have empirical support as of yet. Treatment of co-morbid anxiety and substance abuse is not supported empirically either.
13.	Lash et al. [58]	Contracts, attendance, prompts and reinforces (CPR) & Standard treatment (STX)	Comparison study	CPR appears to be more effective in treatment adherence compared to STX
14.	Lemieux [31]	Social support and familial support: DV-perception of available social support: IV-number of visits, letters, length of time in treatment and criminal history.	Correlational study	Social support was significantly associated with the IVs'. Substance abuse treatment should address environmental factors, social and familial support.
15.	Leshner [59]	Review of addiction as a disease	Review	Addiction as a chronic relapsing disorder with behavioural and social context aspects. Treatment should incorporate biological, behavioural and social aspects.
16.	Malhotra et al. [5]	Review of Psychosocial Treatments of Substance Use Disorders in Adolescents (with cocaine)	Review	Psychosocial treatment is effective in treating the addict and his/her family as well.
17.	Smith and Book [3]	Review of anxiety and substance use disorders	Review	Both anxiety and substance abuse disorder should be treated together. Very few studies done on integrated treatment approach.
18.	Vuchinich et al. [50]	Behavioural day treatment, Abstinent- contingent housing & Vocational Training	Correlational study	There is a strong relationship between in patient and follow-up abstinence, independent of the treatment setting
19.	Watkins et al. [8]	Review of treatment for co-occuring affective and substance use disorders	Review	There is evidence of simultaneous treatment for co morbid disorders and substance abuse. Pharmacotherapy has influence on outcome but studies lack empirical evidence on specificity of the treatment

Table 1: Characteristics and contributions from the literature based on the type of treatment and methodology employed.

family-social, legal, medical, interpersonal and psychiatric problems as well. One study reported the results of the impact of social anxiety in a group treatment setting from an experiment, two studies discussed the neurobiology of addiction, stress and anxiety, there were seven reviews of substance abuse treatment out of which one was particularly on psychosocial treatments and provided a good reference point for the purpose of this study as well, one study on the significance of addressing environmental factors, social and familial support in treatment, and a comparison study on Contracts, attendance, prompts and reinforces (CPR) and Standard treatment (STX) (Table 1). There did not appear to be a comprehensive study reporting the effects of psychosocial treatments on both the dependent variables - relapse prevention and diminution in social anxiety. There was only one study that describes influence of familial, environmental and social variables in predicting relapses [31,32]. This study provided an insight on the psychological and social aspects influencing addictions and some of the psychosocial treatment possibilities. The most common methodologies adopted in these studies were: seven quasi experimental studies, seven reviews, three correlation studies, one experiment and one comparison study.

Description of the Studies

Avants et al. [4] in their quasi-experimental study identified 307 methadone-dependent patients (72% male and 28% female). After 12 weeks, it was found that socially anxious patients undergoing the less intensive psychosocial treatment programme were drug free longer compared to patients undergoing the more intensive programme. The paper did not appear to provide a specified procedure to diagnose social phobia, while the effects of individual and group drug counseling (GDC) along with its cost effectiveness were not proven [4,33]. It is observed that this is the only psychosocial treatment programme which discusses the effects of social anxiety on substance abusers.

The commonly cited studies by Crits-Christoph et al. [27,29,34] discuss cocaine abuse and psychosocial treatments. Crits-Christoph et al. [35] conducted a study with data obtained from a research conducted by the National Institute on Drug Abuse and Collaborative Cocaine Treatment Study [27]. It was a six month quasi- experimental study as an active stage followed with three months of a booster to the initial treatment. 487 cocaine dependents were assigned to cognitive-therapy, supportive expressive therapy, individual plus group drug counselling and group drug counselling alone. The results obtained revealed the efficacy of individual plus group drug counselling. Crits-Christoph et al. [27] further extended the results of the study to reveal the significance of treatment for cocaine dependence but failed to impact other associated areas [27,36-38] and other forms of substances. The design of this study included an extension of two weeks at the initial pre-treatment assessment which may have influenced the outcome of the treatment limiting generalizability (Crits-Christoph et al.) [27].

Crits-Christoph et al. [35] observed the efficacy of endorsing the 12 step model and participation as mediators of treatment outcome with three treatment groups while psychiatric severity and antisocial personality traits were observed as covariates for their ability to predict outcomes [29]. The results revealed the significance of reinforcing the 12 step model as partial statistical mediator on the impact of individual plus group drug counselling [29]. The 12 step model of treatment consists of self-help groups such as Alcoholics Anonymous and Narcotics Anonymous, comprising recovering substance abusers offering emotional support to one another [39].

Ana et al. [25] in a quasi experimental study investigated the effect of Group Motivational Interviewing (GMI) on 101 patients attending after care treatment sessions. The results supported GMI influencing treatment outcome when added to standard inpatient treatment for dual diagnosed substance abusers [25]. It was observed that only patients who participated in GMI during inpatient treatment were more frequently attending after care treatment and consumed less alcohol during follow up. It was not possible to ascertain the efficacy of GMI with non patients and the results were limited to alcohol consumption only.

Crits-Christoph et al. [34], in a quasi-experiment conducted after 12 months post treatment, report the efficacy of Supportive Expressive Therapy (SET) compared to Individual Drug Counselling (IDC) especially with changes in family and social problems. The data was obtained from an original study by National Institute on Drug Abuse Collaborative Cocaine Treatment Study [34,35]. It is a concern that repeated analysis of the similar data may raise questions of reliability and validity.

Barber et al. [26] further examined 108 cocaine dependents who participated in a quasi-experiment with Supportive Expressive Dynamic Therapy. The results revealed that low levels of adherence by therapists to SET predicted better treatment outcome. This could mean that therapists' individual characteristics and flexible theoretical approaches in counselling are better in influencing treatment outcomes compared to adherence to SET. A second finding was consistent with Barber et al. [26] that an integrated approach with IDC and SET techniques reduces drug use. The study was unable to prove causality due to the small sample size and it was limited to only cocaine dependents.

Book et al. [14] conducted an experiment with a social anxiety group (N = 38, 27 women) and a control group (N = 65, 46 women). Their primary drug of choice was either alcohol or cocaine. Subjects were recruited from intensive outpatient treatment programmes (IOPs) between the 14th and 28th day of treatment. This was to avoid the influence of the physical withdrawal effects subjects would have experienced in early remission from the substance. The results revealed that one out of three substance abusers enrolled in IOPs may have current social anxiety disorder. These abusers are less likely to participate in self help groups due to their shyness [14]. McKellar et al. [40] reported that participation in Alcoholic Anonymous and Narcotic Anonymous self-help groups in treating substance abuse, is highly correlated with positive clinical outcomes [14]. The Alcoholic and Narcotic Anonymous self-help groups consist of people in recovery from their drug of choice meeting to discuss their commonalities in battling substance dependency. This self-help programme is based on the 12-step model of treatment. The macro goal of the study by Book et al. [14] is to prove that social anxiety among substance abusers is an inhibitor in addiction treatment activities. For this purpose social anxiety was measured with only the attitudes of the participants. The 'actual behavioural outcomes' were not taken into consideration [14]. The author infers further that sample size is another concern in generalizing results of the study.

A correlational study of psychosocial functioning with 159 American Indian women by Chong and Lopez [41] identified the relationship between social networks and social support to psychosocial functioning. Lemieux [31] reported in another study on 101 incarcerated substance abusers on social support and stressed the need for family and social support as social support to substance abusers is inversely related to criminal activity [32,42]. The author argues that although both studies reveal the need for social support to enhance psychosocial functioning, both studies were carried out with

diverse populations. The results of the studies can only be generalized to the particular population and treatment setting.

Further Refined Manual Search

The researcher conducted a systematic and detailed review of the selected studies through bibliographical trails and identified nine studies particularly on psychosocial treatment programmes and all its components treating social anxiety reduction and relapse prevention (Table 2). There appeared to be only one integrated psychosocial treatment programme [29] and one experiment (Book et al.) [14] conducted during the period from 1995 to 2010. All the studies were observed to have incorporated various measurement tools to analyze the dependant variables (Table 2).

Assessment Tools

The following measurement tools (Table 2) were applied for the purpose of the studies: (i) the Addiction Severity Index (ASI) [43] in five of the studies [4,26,29,34,41] (ii) the Hamilton Rating Scale for Depression (HRSD) in three studies [27,29,34], (iii) Beck Anxiety Inventory (BAI) [44] in two studies [30,33], (iv) Beck Depression Inventory [45] in three studies ([4,14,27]) and (v) the California Psychological Inventory (CPI) [46] in two studies [29,34]. It was not possible to identify one standardized instrument tool which could measure both the variables discussed- social anxiety and relapses.

Participants

Only one experiment was observed to have been conducted on social anxiety [14]. The longitudinal study conducted by Crits-Christoph et al. [27,29,34,35] with data obtained from a research conducted by the National Institute on Drug Abuse and Collaborative Cocaine Treatment Study, appeared to have the most number of participants (N = 487 cocaine dependents). The data gathered in 1999 was analyzed and published over a period of time.

Avants et al. [4] in their quasi-experiment analyzed data gathered from 307 substance abusers (randomly assigned to the treatment group) on methadone maintenance for cocaine dependency. Five other studies conducted had small sample size of only 101-159, with three of them randomly assigned to the treatment groups [26,27,32], one consisted of voluntary participation [41] and another reported results of a study with 101 participants from three intensive outpatient programmes [14]. The remaining three quasi-experiments had 408 randomly assigned

Author/s	Method	Sample size/Sampling type	Measurements
Ana et al. [25]	Quasi experiment – GMI and TAAC	101-random assignment	1.Brief symptom Inventory 18 (baseline data) 2.Number of days in out -patient treatment, 12 step meetings and visits by mental health professionals (3 month follow up)
Avants et al. [4]	Quasi experiment- Low intensity enhanced standard methadone maintenance intervention (E-STD) and high intensity, socially demanding day treatment programme (DTP)	307 methadone maintenance -random assignment	1.Pre treatment interview with Structured Clinical *interview* for *DSM-III-R* 2. Addiction Severity Index (ASI) 3. Risk Assessment Battery (HIV risk behavior measurement) 4. Beck Depression Inventory (BDI) 5. State Trait Anxiety Inventory 6.Social Avoidance and Distress Scale
Barber et al. [26]	Quasi experiment-Supportive Expressive Therapy (SET) and Individual Drug Counseling (IDC)	108 cocaine dependants – random assignment	1.Adherence Competence Scale for SET (ACS-SET) 2. Adherence Comptence Scale for IDC (ACS-IDC) 3.Addiction Severity Index (ASI) 4.Psychiatric severity composite score
Chong and Lopez [41]	Correlational Study – Relationship of social networks and social support to psychosocial functioning	159 substance dependents - voluntary participation	1.Texas Christian University Intake Questionnaire (TCU-IQ) 2.Client Evaluation of Self and Treatment (TCU-EST) 3.Addiction Severity Index (ASI)
Crits-Christoph et al. [27]	Quasi experiment –Psychosocial treatment programme	487 cocaine dependents-random assignment	1.Hamilton Rating Scale for Depression (HRSD) 2.Beck Depression Inventory (BDI) 3.Inventory Interpersonal Problems (IIP) 4. Brief Symptom Inventory Global Severity Index (BSI)
Crits-Cristoph et al. [28]	Quasi experiment-12 step philosophy as mediator of outcome	487 cocaine dependent –random assignment	1.ASI 2.HRSD 3.Beck anxiety inventory (BAI) 4.California Psychological Inventory (CPI) 5.The Addiction Recovery Scale (ARS) 6.Belief about Substance Abuse Scale (BASAS) 7.Self-Understanding of Interpersonal Problems Scale (SUIP)
Crits-Cristoph et al. [34]	Quasi-experiment – Supportive Expressive Psychodynamic Therapy (SE) and IDC	487 cocaine dependent –random assignment	1.ASI 2.HRSD 3.BAI 4. Brief Symptom Inventory 5.CPI 6.Cocaine Craving Scale 7.ARS
Lemieux [31]	Correlational study – Social support among males and females in corrections- based substance abuse treatment programme (Cognitive behavioral therapy and drug education)	101 inmates - random assignment	1.12-item Multidimensional scale of Perceived Social Support (MSPSS)
Book et al. [14]	Experiment – Socially anxious substance abusers willingness to participate in group treatment programmes as compared to non -socially anxious abusers.	101 - 3 intensive outpatient treatment programmes. Treatment and control group	1.The Leibowitz social Anxiety Scale (LSAS) 2.BDI 3. The Penn State Worry Questionnaire

Table 2: Characteristics of nine psychosocial treatment studies based on the methods, sampling size and type and the measurements employed.

participants – one of the largest studies of psychosocial treatment programme for cocaine dependents [27,29,34,35].

Research Gaps and Significance

Hesse [23], based on a review of published literature, mentioned that there was currently a need to come up with treatment options for social anxiety and substance abuse disorders. Watkins et al. [8] further reiterated in their review of treatment recommendations for co-occurring disorders with substance abuse, that there appears to be poor evidence of treatment efficacy for patients with co-occurring disorders. This section looks at the research gaps and how this review has helped to address the gaps and add on to knowledge of the subject.

Research Gaps

Crits-Christoph et al. [27,29,34] discuss studies of psychosocial treatment programmes which have produced evidence for efficacy in treating mainly cocaine dependence [29,37,38]. Some limitations of the study were: generalizability of the study is questionable as the therapists selected were all trained and highly qualified; Crits-Christoph et al. [34] discuss the efficacy of supportive expressive therapy in psychosocial treatment but later mention that the inclusion/exclusion criteria of the participants limit generalizability only to non co-morbid participants; treatment was focused on cocaine dependents; while patients in the IDC+GDC group were reported to have attended more 12 step meetings [29,47] which could have acted as mediators of the treatment.

Crome [48] discusses the limitations of psychosocial perspective of treatment for the adult substance abusing patients but there is a gap in the study with other population. Hesse [23] in his systematic review revealed that the integrated psychosocial treatment programmes for substance abusers dual diagnosed with depression to have positive outcomes. He further mentions that the statistical significance of success was only obvious with percent days abstinent at follow up [23] other areas tested were not significant. Higgins et al. [49,50] discuss the outpatients' abstinent from cocaine use during treatment as a strong predictor of abstinence during a 12 month follow-up of treatment but the results are limited to outpatients and those who are of stable socioeconomic [51].

Treatment programmes generally focus on substance use reduction and abstinence but more often not, other associated problems such as medical, legal, employment problems and thus co-morbidity complications which arise with dependency are ignored. Carroll et al. [51,52] in comparing relapse prevention and interpersonal psychotherapy reported that there was no significant improvement for legal, medical, employment, alcohol, family and social problems (Crits-Christoph et al. [27]). Psychosocial treatment programmes are capable to meet the needs of the population and are able treat not only the co-morbidity but also other variables that coexist with substance abuse.

Petry et al. [52,53] discuss the high relapse rates among substance abusers [54] but there appears to be a gap in the study of relapse rates in relation to social anxiety. This is particularly true especially in Singapore where there is a paucity of studies conducted on psychosocial treatment programmes for substance abusers. This review has revealed the lack of empirical evidences in treating substance abusers for co-morbidity and whatever evidence that does exist is specific to a particular drug or treatment setting. There appears to be an obvious gap in the literature for psychosocial treatment programmes that treat social anxiety and relapse prevention as dependent variables.

Future Research Areas

There is a constant changing conceptualization of the substance abuse problem and its relation to clients with co-morbid disorders. Many studies and reviews have provided evidence that the relapse rates for this group of abusers as higher and long term prognosis poorer [55]. Anxiety disorders are particularly noted to be highly related to substance dependence (odds ratio [OR] = 3.0-6.0) impacting the outcome of treatment for this form of co-morbidity [9]. There is a need for an integrated form of treatment in order to meet the demands of "….the mutual maintenance pattern." of this dual disorders [9]. There is a continuous risk of relapse occurring for substance abusers suffering either from the substance abuse disorder or the co-morbid disorder and treatment have to be for long-term, meeting all the psychosocial needs.

It is the researcher's understanding as evidenced from this review that Singapore lacks a locally derived psychosocial treatment programme which would meet the demands of substance abusers diagnosed with co-morbidity. This review has provided sufficient evidence for the need to derive a psychosocial treatment programme which is generalizable to population of various ages, culture, and religion particularly within the local Singapore context.

This paper is intended to build on the current understanding and to fill the gaps in the literature of psychosocial treatment for substance dependency in relation to relapse prevention and social anxiety reduction. More trials which can replicate the findings of the existing research are necessary to achieve an optimized and integrated treatment programme for substance abusers to prevent relapses and to reduce social anxiety.

References

1. Erickson CK (2007) The science of addiction: from neurobiology to treatment. Norton & Company , New York.
2. World Health Organiation (2004) The world health report 2004. Geneva: The World Health Organization.
3. Smith P, Smith RL (2008) Substance abuse counseling: theory and practice. (5thedn), Merrill Counseling.
4. Avants SK, Margolin A, Kosten TR, Rounsaville BJ, Schottenfeld RS (1998) When is Less Treatment Better? The Role of Social Anxiety in Matching Methadone Patients to Psychosocial Treatments. J Consult Clin Psychol 66: 924-931.
5. Anil Malhotra, Debasish Basu, Nitin Gupta (2005) Psychosocial Treatment for Substance Abuse in Adolescents. J. Indian Assoc. Child Adolesc Ment Health 1: 2.
6. Hien D, Zimberg S, Weisman S, First M, Ackerman S (1997) Dual diagnosis subtypes in urban substance abuse and mental health clinics. Psychiatr Serv 48: 1058-1063.
7. Primm AB, Gomez MB, Tzolova-Iontchev I, Perry W, Vu HT, et al. (2000) Mental health versus substance abuse treatment programs for dually diagnosed patients. J Subst Abuse Treat 19: 285-290.
8. Watkins KE, Hunter SB, Burnam MA, Pincus HA, Nicholson G (2005) Review of treatment recommendations for persons with a co-occuring affective or anxiety and substance use disorder. Psychiatr Serv 56: 913-926.
9. Smith JP, Book SW (2008) Anxiety and Substance Use Disorders: A Review. Psychiatr Times 25: 19-23.
10. Lubman DI, Allen NB, Rogers N, Cementon E, Bonomo Y (2007) The impact of co-occurring mood and anxiety disorders among substance-abusing youth. J Affect Disord 103: 105-112.
11. Tiet QQ, Mausbach B (2007) Treatments for patients with dual diagnosis: a review. Alcohol Clin Exp Res 31: 513-536.
12. Novins DK, Mitchell CM (1998) Factors associated with marijuana use among American Indian adolescents. Addiction 93: 1693-1702.
13. Ogborne AC (2006) Theories of Addiction and Implications for Counselling (3rd edn) S. Harrison, CP Virginia, JO Prochaska (2006) Alcohol and Drug Problems: A Practical Guide for Counsellors: 3-21.

14. Book SW, Thomas SE, Dempsey JP, Randall PK, Randall CL (2009) Social anxiety impacts willingness to participate in addiction treatment. Addict Behav 34: 474-476.

15. Lydiard RB, Brady K, Ballenger JC, Howell EF, Malcolm R (1992) Anxiety and mood disorders in hospitalized alcoholic individuals. Am J Addict 1: 325-331.

16. Terra MB, Barros HM, Stein AT, Figueira I, Jorge MR, et al. (2006) Social anxiety disorder in 300 patients hospitalized for alcoholism in Brazil: high prevalence and undertreatment. Compr Psychiatry 47: 463-467.

17. Adamson SJ, Todd FC, Sellman JD, Huriwai T, Porter J (2006) Coexisting psychiatric disorders in a New Zealand outpatient alcohol and other drug clinical population. Aust N Z J Psychiatry 40: 164-170.

18. Thomas SE, Thevos AK, Randall CL (1999) Alcoholics with and without social phobia: a comparison of substance use and psychiatric variables. J Stud Alcohol 60: 472-479.

19. Efran JS, Korn PR (1969) Measurement of social caution: self-appraisal, role playing, and discussion behavior. J Consult Clin Psychol 33: 78-83.

20. Kuntz-Melcavage K, Freeman WM, Vrana KE (2008) CNC Gene Implicated in Relapse. Substance Abuse Research and Treatment 2: 1-12.

21. Marlatt GA, Gordon JR (1985) Relapse Prevention: Maintenance strategies in the Treatment of Addictive Behaviors. Guilford Press, New York.

22. Rusdi AR, Noor Z, Muhammad, MAZ, Muhammad HH (2008) A Fifty-Year Challenge in Managing Drug Addiction in Malaysia. Journal of the University of Malaya Medical Centre 11: 3-7.

23. Hesse M (2009) Integrated psychological treatment for substance use and co-morbid anxiety or depression vs. treatment for substance use alone. A systematic review of the published literature. BMC Psychiatry 9: 6.

24. American Psychiatric Association (2000) Diagnostic and Statistical Manual of Mental Disorders (4th edn), Washington, DC.

25. Santa Ana EJ, Wulfert E, Nietert PJ (2007) Efficacy of group motivational interviewing (GMI) for psychiatric inpatients with chemical dependence. J Consult Clin Psychol 75: 816-822.

26. Barber JP, Gallop R, Crits-Cristoph P, Barrett MS, Klostermann S, et al. (2008) The Role of the Alliance and Techniques in Predicting Outcome of Supportive-Expressive Dynamic Therapy for Cocaine Dependence. Journal of Psychoanalytic Psychology 25: 461-482.

27. Crits-Christoph P, Siqueland L, McCalmont E, Weiss RD, Gastfriend DR, et al. (2001) Impact of psychosocial treatments on associated problems of cocaine-dependent patients. J Consult Clin Psychol 69: 825-830.

28. Luoma JB, Hayes SC, Twohig MP, Roget N, Fisher G, et al. (2007) Augmenting continuing education with psychologically focused group consultation: effects on adoption of group drug counseling. Psychotherapy (Chic) 44: 463-469.

29. Crits-Christoph P, Gibbons MB, Barber JP, Gallop R, Beck AT, et al. (2003) Mediators of Outcome of Psychosocial Treatments for Cocaine Dependence. J Consult Clin Psychol 71: 918-925.

30. Moos RH (2003) Addictive disorders in context: principles and puzzles of effective treatment and recovery. Psychol Addict Behav 17: 3-12.

31. Lemieux C (2002) Social Support Among Offenders with Substance Abuse Problems: Overlooked and Underused? J Addict Offender Couns 23: 42-57.

32. Wexler HK (1995) The success of therapeutic communities for substance abusers in American prisons. J Psychoactive Drugs 27: 57-66.

33. Hope DA, Heimberg RG, Bruch MA (1995) Dismantling cognitive-behavioral group therapy for social phobia. Behav Res Ther 33: 637-650.

34. Crits-Christoph P, Gibbons MB, Gallop R, Ring-Kurtz S, Barber JP, et al. (2008) Supportive-Expressive Psychodynamic Therapy for Cocaine Dependence: A Closer Look. Psychoanal Psychol 25: 483-498.

35. Crits-Christoph P, Siqueland L, Blaine J, Frank A, Luborsky L, et al. (1999) Psychosocial treatments for cocaine dependence: National Institute on Drug Abuse Collaborative Cocaine Treatment Study. Arch Gen Psychiatry 56: 493-502.

36. Carroll KM, Rounsaville BJ, Nich C, Gordon LT, Wirtz PW, et al. (1994) One-year follow-up of psychotherapy and pharmacotherapy for cocaine dependence. Delayed emergence of psychotherapy effects. Arch Gen Psychiatry 51: 989-997.

37. Higgins ST, Budney AJ, Bickel WK, Foerg FE, Donham R, et al. (1994) Incentives improve outcome in outpatient behavioral treatment of cocaine dependence. Arch Gen Psychiatry 51: 568-576.

38. Higgins ST, Budney AJ, Bickel WK, Hughes JR, Foerg F, et al. (1993) Achieving cocaine abstinence with a behavioral approach. Am J Psychiatry 150: 763-769.

39. Ferri M, Amato L, Davoli M (2006) Alcoholics Anonymous and other 12-step programmes for alcohol dependence. Cochrane Database Syst Rev CD005032.

40. McKellar J, Stewart E, Humphreys K (2003) Alcoholics anonymous involvement and positive alcohol-related outcomes: cause, consequence, or just a correlate? A prospective 2-year study of 2,319 alcohol-dependent men. J Consult Clin Psychol 71: 302-308.

41. Chong J, Lopez D (2005) Social networks, support, and psychosocial functioning among American Indian women in treatment. Am Indian Alsk Native Ment Health Res 12: 62-85.

42. Slaght E (1999) Focusing on the family in the treatment of substance abusing criminal offenders. J Drug Educ 29: 53-62.

43. Fureman I, Parikh G, Bragg A, McLellan AT (1990) Addictions Severity Index (5thedn) University of Pennsylvania Veterans Administration Center for Addiction.

44. Beck AT, Epstein N, Brown G, Steer RA (1988) An inventory for measuring clinical anxiety: Psychometric properties. J Consult Clin Psychol 56: 893-897.

45. Beck AT, Steer RA, Garbin MG (1988) Psychometric Properties of The Beck Depression Inventory: Twenty-five Years of Education. Journal of Clinical Psychology Review 8: 77-108

46. Megargee EI (1972) The California Psychological Inventory Hnadbook. San Francisco: Jossey-Bass.

47. Weiss RD, Griffin ML, Gallop R, Onken LS, Gastfriend DR, et al. (2000) Self-help group attendance and participation among cocaine dependent patients. Drug Alcohol Depend 60: 169-177.

48. Crome IB (2006) Overview: Beyond Guidelines and guidance- psychosocial perspectives on treatment interventions for young people with substance problems in the United Kingdom. Drugs: education, prevention and policy 13: 203-224.

49. Higgins ST, Badger GJ, Budney AJ (2000) Initial abstinence and success in achieving longer term cocaine abstinence. Exp Clin Psychopharmacol 8: 377-386.

50. Vuchinich R, Wallace D, Milby JB, Schumacher JE, Mennemeyer S (2009) Relations Between In-Treatment and Follow-Up Abstinence Among Cocaine-Dependent Homeless Persons in Three Clinical Trials. Exp Clin Psychopharmacol 17: 165-172.

51. Carroll KM, Rounsaville BJ, Gawin FH (1991) A comparative trial of psychotherapies for ambulatory cocaine abusers: relapse prevention and interpersonal psychotherapy. Am J Drug Alcohol Abuse 17: 229-247.

52. Petry NM, Kolodner KB, Li R, Peirce JM, Roll JM, et al. (2006) Prize-based contingency management does not increase gambling. Drug Alcohol Depend 83: 269-273.

53. Hubbard R, Simpson DD, Woody G (2009) Treatment Research: Accomplishments and Challenges. Journal of Drug Issues 39: 153.

54. Flynn PM, Brown BS (2008) Co-occurring disorders in substance abuse treatment: issues and prospects. J Subst Abuse Treat 34: 36-47.

55. Abdullah N (2005) Exploring Constructions of the 'Drug Problem' In historical and Contemporary Singapore. New Zealand Journal of Asian Studies 7: 40-70.

56. al'Absi, Mustafa (2007) Stress and addiction: Biological and psychological mechanisms. Academic Press, Burlington, MA.

57. Fals-Stewart W, Bates ME (2003) The neuropsychological test performance of drug-abusing patients: an examination of latent cognitive abilities and associated risk factors. Exp Clin Psychopharmacol 11: 34-45.

58. Lash SJ, Stephens RS, Burden JL, Grambow SC, DeMarce JM, et al. (2007) Contracting, prompting, and reinforcing substance use disorder continuing care: a randomized clinical trial. Psychol Addict Behav 21: 387-397.

59. Leshner AI (1997) Addiction is a brain disease, and it matters. Science 278: 45-47.

2.2 Theories of problematic substance use: publications two, three and four.

Publications two and three are an extension of my interest in providing practitioners with evidence, and explore key explanations of problem substance use and treatment approaches. Both journals (Intervene and Counselling Australia) have a broad reach online and in print among practitioners and service providers in the field of counselling and psychology, but Intervene also targets a recovery service user readership. Publication two is presented as an opinion paper on the disease model, very generally discussing the validity of the model itself. This is useful primarily for a lay audience and generalist practitioners in the field as it helps to explain why substance dependence becomes unmanageable to the individual. The general public is a legitimate audience for academia as aiding public understanding of science itself and specific topics such as problematic substance use are also part of the academic's role. Publication three, on the other hand, would reach practitioners and service providers, thus requiring a more academic approach in the writing style.

Publication two describes problematic substance use using the disease model, claiming this model provides a biological/behavioural view of why it becomes unmanageable. The discussions on the dysfunctional pursuit of rewards, inability to delay gratification, and Mate's (2011) theory of substances serving the purpose as emotional anaesthetics, helps to link the disease model with problem substance use, explaining the inability to abstain from the dependency. On the other hand, while the

argument presented on genetic influences in problem substance use helps provide a platform to link the disease model with addiction, the deliberations by Mate (2011) appear to dispute the likelihood of the genetic lineage. Though this presents a critique of the genetic predisposition model, it would have helped the reader gain a better understanding if a summary of the discussion, based on the conflicting views, was included.

The disease and behavioural theories indicate a deterministic and universal explanation of problematic substance use and omits contextual explanations. Gopalkrishnan (2018) explained how theories of mental health, such as the disease and behavioural models, have emerged from a Western contextualization of illness. Though these models have provided a framework for the understanding and treatment of mental distress, they do not take into consideration the complexity of psychosocial cultural influences (Fernando, 2014). Biological and behavioural explanations can be applied to all humans but they are less culturally sensitive than the psychosociospiritual explanations of problematic substance use. Tribe (2005) explained Western approaches to health focus more on intrapsychic or individualistic pathological experiences while the familial and community factors are ignored.

2.2.1 Theory into practice

Discussion on what defines a good theory is an ongoing debate (Joas & Knobi, 2009; Wacker, 1998). It is my understanding that theories provide an explanation and

rationale for situations while being a guide to defining options for practice. Theories may appear formulaic but often fail to manage the real-life variables influencing the outcomes. Harrington (2005) suggested the necessity of linking theories to life situations, otherwise, the theories would lack any real connection and be merely ideas presented by the academic; theories need to be tested to support their validity.

The explanation of virtues of a good theory from Quine and Ullian (1980) helps understand the role theories play and their significance in specific contexts. The disease model discussed in publication two appears as an abstraction, based on Quine and Ullian's model. Abstraction refers to a good theory as having the ability to assimilate various other influences and relationships (Quine & Ullian, 1980). Publication two describes problematic substance use as though a disease, is a '…multifaceted condition with various components influencing behaviour' (Shanmugam, 2015, p. 51). Publication three, on the other hand, discusses problematic substance use from both the disease and behavioural theory perspectives and is more deterministic. Though the opinion paper approach can be biased, the theories explored throughout the publications were linked to a practice perspective in response to research objective one.

The Facilitated In-house Recovery Education (FIRE) (publication 4) was developed and implemented as an integrated psychosocial treatment programme for people with problem substance use. FIRE was conducted in the *WE CARE* Community Service Center in Singapore in 2006. *WE CARE* conducts and develops community-based treatment programmes and is managed by a team of specialist clinicians offering

services such as counselling, psychoeducational programmes, outreach programmes to the community, in-house support groups, and referrals to other agencies while functioning as a drop-in centre for people who seek recovery and need to be in a safe environment.

I worked in *WE CARE* as a Clinical Manager in 2009 and then as Program Director. During my tenure, I was involved in programme development, counselling and managing the activities at the centre. The clients were mainly Singaporeans with substance use-related issues referred by local agencies such as prisons, hospitals and other counselling centres in Singapore.

The biopsychosociospiritual approach then represented a new era for substance use treatment in Singapore and Malaysia, which we had to learn from our specialist Western practitioners from The Institute of Mental Health in Singapore. The Institute engaged the expertise of Western specialists to share the biopsychosociospiritual treatment approach by regularly organizing training and seminars locally. I learnt to adapt this Western treatment model in *WE CARE* to meet both the bio-psychosocial and cultural needs of each client. Singapore is a country rich with a multicultural population evolving and adapting to not only socioeconomic needs but also acculturation. We were exposed to clients who were facing substance use-related issues with complex psychosocial demands, and treatment had to tackle each of the demands while the treatment outcomes had to be measurable. Thus, the motivation to evaluate and identify treatment outcomes began to develop. An evaluation would also be helpful to

justify the costs of funding the programmes while ensuring the stakeholders were satisfied with the operating costs. This motivation gave birth to the drive to evaluate the outcomes of the Facilitated In-house Recovery Education (FIRE) programme in *WE CARE*.

2.2.2 Context of the evaluation

The Misuse of Drugs Act (MDA) for Singapore is known for providing some of the strictest laws in the world in dealing with drug-related crime. The laws were amended in 1975 to include the death penalty for drug trafficking offences (Boon, 2006). This was targeted at curbing crime, so could not address substance use treatment. Initiatives such as Preventive Drug Education and Enforcement by the Central Narcotics Bureau (CNB), Treatment and Rehabilitation programmes by the Prisons Department and Aftercare and Continued Rehabilitation by Singapore Corporation of Rehabilitative Enterprises (SCORE), aimed to address this.

The Drug Rehabilitation Centers in Singapore focused mainly on in-prison detoxification, physical education, work therapy and counselling. Substance use-specific treatment approaches based on the biopsychosociospiritual model were lacking at the time. In a ground-breaking paper by Marlatt and Gordon (1985), it was reported that relapse rates were observed to be high with treatment programmes. Rusdi et al. (2008) explained the high relapse rates as a result of the treatment approach being too focused on the problem and stigma of problematic substance use while missing other

factors. Appreciating the various psychosocial and sociocultural influences within the community, the clinical team at *WE CARE* recognized the need for an integrated treatment approach which would meet the holistic needs of the people with problem substance use. FIRE was developed as a result of this need and funded by the local government authorities, mainly the Ministry of Community Development.

Publication four is published in Counselling Australia, a peer-reviewed journal mainly for counsellors and psychotherapists with an online reach to tens of thousands of subscribers. The purpose of selecting this journal was to disseminate the findings to the practitioner community and help bridge the theory-practice gap.

Evaluation results revealed a significant reduction in the levels of depression, anxiety and stress post-treatment. The findings help respond to my thesis objective three, providing evidence for the effectiveness of a psychosocial treatment programme in a non-Western context, as FIRE was developed for Singaporeans diagnosed with problematic substance use.

The pilot study ensured the reliability and validity of the Depression, Anxiety and Stress Scale (DASS 21) tool and ensured participants understood the questionnaires, ensuring there was no language barrier as the FIRE programme was conducted in English. The pilot study also served to ensure cultural acceptability of the tool as the DASS21 tool was initially developed with a Western population in mind. While the pilot

did not formally validate the tool for a Singaporean population, it was important to ensure its relevance to this population and practice context. The absence of a validated tool for this population also illustrates the lack of research resources for LMIC studies.

Walliman (2011) explains evaluation research methods as a means of identifying the quality of the events or programme, in this case, the FIRE programme. Walliman (2011) explains evaluations as a descriptive type of research where the findings help improve standards of care. The purpose of publication four was to improve the quality of the programme from the findings, while submitting the findings to patrons and funders of *WE CARE.* There were no qualitative interpretations included which would have helped further clarify the outcomes of the analysis. Short interviews with the participants may have been an option to further validate findings from the statistical analysis.

2.2.3 Summary

The discussions in publications two and three on the biological and behavioural models in substance use treatment appear to help guide treatment but very often conflict with the more psychosocial systems approach. Though there is evidence to support problematic substance use as biologically determined, it is also a multifaceted condition in relation to interactions between people and their environment. The systems approach in developing treatment programmes guided by the theories is helpful to

provide a framework, but as Arendt (1958) explains, theories are better employed as guides to make responsible choices for practice, as there is a need to link theory to application. Thus, it is helpful when developing theories in applied sciences to ensure their practicality. The integrated treatment approaches may present a more holistic and culturally appropriate path, producing comprehensive and responsive treatment options.

Though publications two and three were unable to provide evidence for psychosociospiritual approaches, both the publications illustrate how weighted evidence is toward bio-medical explanations. While these are likely to be universal, psychosocial and spiritual elements are culturally determined. The motivation for publication eight, discussed in a later section, was a result of this lack of attention given to psychosocial and spiritual elements, especially focusing on treatment approaches in Malaysia and how they have evolved into a more person-centred approach.

Publications two and three aim to link theories to practice by being disseminated through public- and practitioner-facing publications. Though both the publications employed an opinion paper approach, the linkage between theory and practice assisted in putting the evidence into contexts. Harrington (2005) discussed how theories should be linked with real-life situations and not just be presented as data, while Joas and Knobi (2009) suggested that theories should also be accepted as generalizations that can be applied. This explanation provides evidence for the linkage between theory and practice and was evident in both the publications.

Publication four, the evaluation of the Facilitated In-house Recovery Education (FIRE) Treatment Programme, was better able to respond to research objective three, providing evidence for the effectiveness of a psychosociospiritual treatment approach in a non-Western context.

This section focused on my exploration of the key theories of substance use and treatment approaches, influenced by the need for evidence-based practice and adoption of the existing Western models. The following section demonstrates my development of practice for a SE Asian population in recognition of a need for more culturally specific approaches, especially addressing family needs.

Publication two

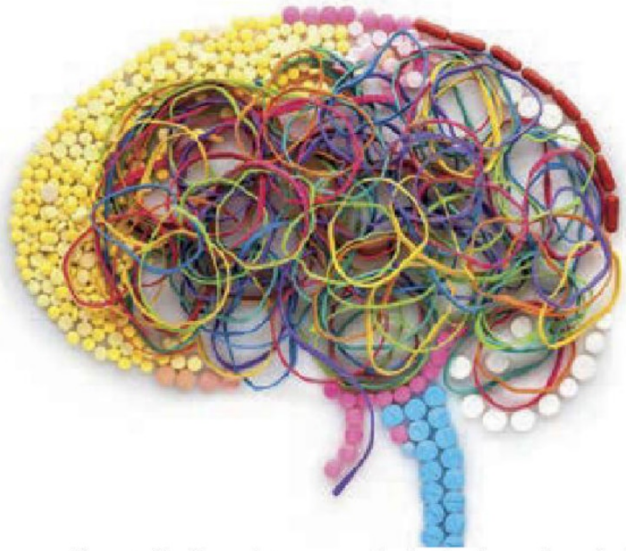
Shanmugam, P.K. (2015). The Disease Model Examined, *Intervene, The Recovery Magazine, 155,* 50-51.

The paper was published in a widely read journal in the UK and globally, mainly by practitioners and conference attendants.

59 views and 14 downloads on Academia.edu

The Disease Model Examined

Dr Prem Kumar Shanmugam Offers a Holistic Perspective on the Disease Model of Addiction.



Addiction is a compulsive act with either substances or behaviours, providing a rewarding, soothing, mood altering effect. The addicted person is compelled to pursue this repetitive cycle regardless of the negative consequences it brings to self or others.

The inevitable declination into addiction has a clear and entrenched pattern described by the four C's:

- Compulsive engagement with the behavior.
- Impaired Control. Ritualized behavior
- Continued engagement in the behaviour despite evidence of harm to self and others
- Craving. Intense desire to participate in the behaviour or obtain the substance.

All addictions, whether substance or behavioural, work on the same part of the brain- the reward system, and serve a similar biochemical purpose which is to alter the physiological state in the brain. There is a disruption to specific regions in the brain of people with addictions. These regions serve the normal purposes of motivating, rewarding as well as inhibitory control (Miller & Carroll, 2006). This view has helped greatly with understanding the disease model of addictions.

THE DISEASE AND SELF - MEDICATING

The frontal cortex of the brain and its connections with the circuits of rewards, motivation and memory, play a crucial role in the manifestations of altered impulse control, altered judgment, and the dysfunctional pursuit of rewards (Miller & Carroll, 2006). This can be explained as the desire to "feel normal" as experienced by the affected individual.

People with addictions have difficulty in inhibiting impulsivity in order to delay gratification (Shanmugam, 2012) . The frontal lobes are important in managing this function and when people manifest problems in deferring gratification, there is a neurological locus of these problems in the frontal cortex.

As a result of the dysfunction in the tissues of the brain, resulting in the inability to feel rewarded, there is a strong urge or desire to self medicate.

We hear very often from people suffering with addictions that they are unable to bear the pain any longer and that is the reason they use substances. In some way, addictions originate from pain, which could either be developmental, psychological or even physical and the act of abusing substances serves the purpose of an emotional anesthetic (Mate, 2010).

Therefore if a person suffering from addiction's life is marked and scarred with so much affliction, then seeking relief is natural. Furthermore, if he or she is unable to delay gratification as a result of poor impulse control, the best natural option is to seek

immediate relief. What better way of doing this than abusing substances or involving oneself in compulsive behaviours?

WHAT ABOUT THE DISEASE MODEL?

Though this disease model defining addiction provides a simple to understand and clear picture of how addiction manifests itself, it is convenient to misinterpret the model and narrow it down to purely activities taking place with chemicals in the brain or nerve system. This rationale becomes a reason or even an excuse for people who are inflicted with addictions to get sucked into a sympathy seeking "poor me" mode or "it's not my fault. After all, addiction is a disease and this is beyond my control" mode. These are unhealthy, self-defeating means of managing the addiction, which will ultimately lead the individual back into the vicious cycle.

We know today that this disease is a multi-faceted condition with various components influencing behavior. This complicated condition is a result of the complex interaction between human beings and their environment. Though there is evidence to prove that there are groups of people who may be predisposed to becoming addicts more than others, this only happens when other influences such as psychological, social and even spiritual factors play a role in the manifestation of the addiction.

IS IT IN THE GENES ?

Much of the evidence and science pointing towards the disease model of addictions stem from studies in genetics (Miller & Carroll, 2006). In1990 reporters claimed that researchers from the University of Texas had actually found the gene for alcoholism. The article stated that in five years, scientists would be able to identity children at risk for alcoholism and in time it would be possible to eliminate the gene from affected individuals (Mate, 2010).

Later on it was revealed that the researchers never actually claimed to have found any particular gene for alcoholism and their statements were misinterpreted (Mate, 2010). An addictions specialist, Lance Dodes, writes that there is no gene for alcoholism nor can anyone directly inherit it (Dodes, 2005) . For years some clinicians still subscribe the understanding that there is an addictive gene.

A large number of clinicians accept the hereditary causation for alcoholism which states genetic factors account for about half of the likelihood that an individual will develop addiction (Enoch & Goldman, 2002). The overemphasis on genes being the autonomous dictators of addictions, neglects the reasoning that there actually is interplay between the environment and specific genes (Miller & Carroll, 2006). Though each cell has similar complements of genes in the body, the cells are activated and molded by interaction with the environment and not the genetic code (Lipton, 2005).

An example of the interplay between the environment and genes is how stressful life experiences cause depression in only some people and not everyone experiencing it.

CONCLUSION

A holistic treatment model, employing a scientific approach, with evidence based tools and techniques, focusing on the bio-psycho-socio-spiritual model is essential in arresting addictions. Solace Prime was designed and developed with such an approach in mind. It comprises the following key areas:

- Psychopharmacology as means of managing co-morbid disorders and symptoms of the disease. (Biological)
- Therapeutic techniques (Motivational Interviewing, Cognitive Behavioural Therapy, Rational Emotive Behavioural Therapy and Solution Focused Behavioural Therapy) to challenge the distorted thinking and belief system and work with each stage encouraging people to move from the stuck position. (Psychological and social)
- Step work from the 12 Step model employed in various stages to motivate and build spirituality. (Spiritual)
- Alternative therapies such as yoga, meditation, mindfulness. (Spiritual)
- Group therapy along with interpersonal group sessions. (Social)

Based on years of research and hundreds of hours of consultation with clinical experts from around the world, we employ an integrated treatment approach, developed around the framework of the Trans-theoretical Stages of Change (Prochaska, DiClemente & Norcross,1992). For a long time clinicians have been treating only the presenting symptoms of this multifaceted disorder.

It appears that we have been avoiding and neglecting the root causes leading to addictions. In order to arrest addictions and provide long-term sobriety, it is crucial to appreciate and treat addictions from a holistic approach, tackling each component of the bio-psycho/socio/spiritual aspects maintaining and reinforcing the addiction. Solace Prime is such an approach.

Contributors...

Inside information on the people who shared their knowledge, wisdom and talents to make this issue of Intervene possible

LEWIS HALES

Lewis Hales is a retired therapist who specialised in chemical dependency and adult psychiatric disorders in Georgia for 25 years. He was treatment coordinator and case manager over five state and private institutions and is noted for developing treatment educational programs for patients used throughout Georgia. Lewis has been the CEO of a 501 (C) (3) non-profit educational program for 14 years and is credited for writing over 120 articles and research projects.

KATHRYN STARON

Kathryn Staron has a Masters degree in Clinical Psychology and is recognized by the State of Michigan as a Certified Advanced Alcohol and Drug Counsellor. She has worked in both inpatient and outpatient facilities specialising in dual diagnosis. Kathryn is the former Coordinator of the Addiction Studies Program at Madonna University and an Adjunct Assistant Professor in the Psychology Department. She is currently in private practice and can be reached at kathrynstaron@gmail.com

VIRGINIA GRAHAM MA, MSC

spent the last 22 years working for inpatient facilities in the US and UK – an experience she thoroughly enjoyed. Virginia has now turned her attention to private practice, groupwork and clinical consultancy in London. She continues to work on her doctorate, and the relationship between Spirituality and mental health has always been of interest.

MARTIN PETERS BA (HONS), DIP HE, RN

Martin Peters has been a vital part of DARA Thailand's senior management team since 2011, overseeing the development of both clinical services and operations. With more than two decades in the healthcare field, Martin brings a forward-thinking, person-centred approach to treatment, utilising both cutting-edge and traditional methods to assist people in empowering themselves to live a life free from the grip of addiction and illness.

DR PREM KUMAR SHANMUGAM

Dr Prem Kumar Shanmugam is CEO and Clinical Director of Solace Sabah. Solace is the first private, addiction treatment retreat located in Malaysia. He is one of the founding members and the Regional Director of the Asia Pacific Certification Board (APCB). APCB is actively involved in certifying addiction counsellors/therapists around the Asia Pacific Region. Prem also acts as the President of the Psychotherapy and Counselling Association of Singapore, while being one of the founding members as well.

CHULA GOONEWARDENE

Chula Goonewardene MBACP has worked with over 500 clients in community-based treatment and moved into Treatment Management and Training in 2010. Alongside his private practice, he currently manages a team of twelve to deliver a group-based Recovery Programme in North Westminster and still finds time to play the drums in two bands.

DR MUNIDASA WINSLOW

Dr Munidasa Winslow has been a pioneer in addiction and impulse control disorders in the Asia-Pacific region. He is an addiction psychiatrist who enjoys working with teams to provide solutions for addiction recovery. He is an academic, and also director of a team of recovery professionals at Promises Healthcare, Singapore.

Publication three

Shanmugam, P. K. (2015). Theories of substance dependency, Counselling. *Journal of Counselling Australia*, 15 (2), 17-19.

The paper was published in a widely read Journal in the Australia mainly by practitioners and conference attendants

165 views and 28 downloads on Academia.edu

Theories of substance dependency

By Dr Prem Kumar Shanmugam

PEER REVIEWED ARTICLE

The American Psychiatric Association describes addiction as a chronic relapsing disorder. There is a 50% to 70% possiblity of relapses occuring with people suffering from addictions. Over the years numerous theories have mushroomed around the globe to decscribe and make sense of this disorder while multiple models of treatment have been suggested based on these theories. A theory is applied to explain or predict the existence of a system whereas a model is a description or a representation of a system (West, 2006). In order for treatment of any illness to be optimised and outcomes enhanced, it is important to understand the rationale and logic for the theories.

Stepney (1996) argued that in daily use, substance dependency is very much concerned with moral and medical aspects of drug use, comparing it to either an infringement of moral values or utilisation for medicinal purposes. Tiffany (1990) describes drug use from a 'habit theory' point of view deriving his model from cognitive theories of automatic versus controlled information processing. He suggested that drug use is related to "cognitive, behavioural, motor and autonomic responses stored in long term memory as fully integrated semi automatic processes" (Newlin & Strubler, 2007, p. 509).

Ajzen and Fishbein (1980) on the other hand, formulated The Theory of Reasoned Action (TRA) to suggest that the best predictor of behaviour is intention, which is the cognitive representation of the willingness to act. An additional determinant of behaviour was added to the TRA model; Perceived Behavioural Control (PBC) and TRA was renamed the Theory of Planned Behaviour (TPB; Ajzen, 1991). PBC is described as '..an individual's perceptions of control over behavioural performance in the face of internal and external barriers' (Cooke & French, 2008). TRA has been applied to studies on the use of alcohol, tobacco and other drugs. TRA and TPB have been extensively applied to predict health behaviour (Cooke & French, 2008).

From a philosophical viewpoint, the concept of 'self' was introduced with 'addiction' as an ideology (Erickson, 2007). This concept claimed that addiction is an act of choice and the addict makes a voluntary decision to indulge in the habit.

The disease theories

In the 1960s, the American Medical Association declared alcoholism (which was the more popular substance dependency issue at that point of time) as a 'disease'. (Erickson, 2005). The disease model was used to explain why people addicted to one form of a substance may have histories of addiction to other forms of substances as well (Peele, 1985). This led to the understanding of narcotic addiction as caused by a predisposition to develop the dependency due to inbred endorphin deficiency in the substance abuser (Peele, 1985).

The social-psychological concept of substance dependency was explained with the neurological adaptation resulting from 'self-induced changes in neurotransmission' (Peele, 1985). Involuntary factors were noted with acts of volition with addiction, such as the fact that although initiation is voluntary, there is a predisposition to dependency caused by genetic factors (McLellan, Lewis, O'Brien, & Kleber, 2000). Leshner (1997) stated that there was enough scientific evidence gathered over 20 years to affirm addiction as a chronic, medical brain disease. Following this, scientists began to apply terms such as disorder, illness (Erickson, 2007; McLellan, et al., 2000) and syndrome based on consistent research and data gathered on addiction.

The behavioural theories

Addiction has also been conceptualised as progressing from impulsivity to compulsivity within the vicious cycle of dependency (Erickson, 2007; Koob, 2003). Addicts are impulsive by nature and tend to respond to triggers or cures by giving into the addiction. Over a prolonged period of time, this cycle turns impulsivity into a compulsive behavioru as a result of the conditioning nature of repeated use.

Conditioning theories express substance dependency as that of a highly rewarding behaviour. Reinforcement behaviour models have been extensively applied with behavioural addiction such as gambling, overeating and other forms of non- substance as well as psychoactive drugs (Peele, 1985). There is a strong 'motivational' feature of addiction where there is positive reinforcement due to pleasure or satisfaction experienced (Koob, 2003). Negative reinforcement caused by the negative experience of the dependent when the drug is removed or when he or she experiences uncomfortable emotions, such as anxiety, discomfort and irritability further reinforces the need for the drug (Erickson, 2007).

Addiction has been a battle field of various theories and models with regards to its origin, treatment and

goals (Mc Mahon, 2008). Much of the literature pertaining to substance abuse and dependency indicate that "…the etiology of drug abuse is multifactorial and complex. All the pharmacological and environmental, social and psychological factors play an important part in one way or another in the initiation of drug seeking behaviour" (Ong, 1989, p. 65). In order to achieve a proper model for treatment, it is crucial to blend the pharmacological, experiential, cultural, situational and personality components to best define and describe the motivation towards addiction (Peele, 1985). Reviews of studies on heroin addiction also shared similar opinions on the multiple causation to dependency model (Ong, 1989).

Though these models of addiction provided for an understanding of the onset of dependency, what they failed to show was the cause of the prevalence of the dependent behaviour despite serious adverse consequences. The argument that motivation and specific concepts of biological influences played an important role in the addictive cycle was explained through some of the models but it neglected to prove the combination of internal and external influences such as the biological, psychological and social factors. Engel (1977) introduced the biopsychosocial model which posits the influences of biological and psychological (referring to emotions and behaviours) along with social factors having a stronghold on diseases and illnesses. In order to explain and describe the ideology of a relapsing compulsive behaviour, such as substance dependency, this missing link of an integrated psychosocial model needs to be identified and addressed in order to obtain a successful treatment plan.

Theories in psychology were very much fulfilling the 'sensitising role' in generating ideas to help better understanding (West, 2006). It is arguable that theories are derived for the sake of trying to prove the point or a hypothesis of the researcher and may be conveniently structured or framed for this purpose. In time theories fade away and researchers accept the ideology of multiple theoretical approaches as acceptable and applicable (West, 2006).

Solace Prime is a treament programme developed for both substance as well as behavioural addiction. Multiple causations were considered when the theoretical models influencing addiction were taken into consideration to design Solace Prime. The biopsychosocial model influencing addictions was introduced by Engel (1977) while APA (2013) suggested another important component to this model, spirituality. Spirituality in this context is defined as moral values, self esteem, morale and belief in a Higher Power greater than self. During active addictions people tend to get very self absorbed and generally "selfish" in their needs. These are periods where values are lost and addiction takes over the individual's spirituality. This is sometimes known as becoming"spiritually bankrupt", therefore in treatment the concept of spirituality and gaining back the lost morality is crucial.

Solace Prime was developed based on the BioPsychoSocioSpiritual models. Treatment is targeted with each model employing various counselling techniques such as Cognitive Behavioural Therapy (CBT), Rational Emotive Behavioural Therapy (REBT), Solution Focused Behavioural Therapy (SFBT) and Mindfulness. It is important to appreciate the fact that there is no one technique that fits all and people respond differently. There are may claims that CBT is the best arppraoch to employ when working with addicts but the actual fact is that CBT is the most researched technique and therefore evidence points towards this form of counselling as being better.

In order to asertain that the treatment approach is customised to the needs of each guest, the Transtheoretical stages of change model (Prochaska & DiClementi, 1997) is used as the framework of the

treatment model. This helps to identify which stage of change each individual is at when coming into treatment. Finally, in order to achieve a holistic approach of treatment, physical activities complement the programme. Outdoor and indoor physical activities are introduced in order to help clients learn to feel rewarded by normal pleasure in life and not have the need to use chemical or behavioural stimulants to feel rewarded.

Dr Prem Kumar Shanmugam, Solace Sabah, Malaysia. www.solacesabah.com.

Dr Prem Kumar Shanmugam is Programme and Clinical Consultant with The Solace Sabah Retreat Sdn Bhd. He is one of the founding members and Regional Director of the Asia Pacific Certification Board (APCB). APCB is actively involved in credentialing addiction counsellors / therapists around the Asia Pacific Region. He also acts as the Vice President of the Psychotherapy and Counselling Association of Singapore while being one of the founding members as well.

Prem is an independent researcher, an active facilitator, trainer and an excellent presenter working with people with issues from all walks of life exposed to multicultural settings. He specialises in developing substance abuse treatment programmes and conducting group therapy. He is actively involved in lectures, research and programme evaluation on psychosocial treatment programmes for substance abusers. He brings with him vast experience in working with relationship issues, marital counselling, interpersonal issues and substance abuse counselling. He is a certified practitioner in Management of Family Violence Counselling (Ministry of Community Development Youth and Sports Singapore). Prem is a Certified Masters Addictions Therapist (APCB Singapore), a Certified Masters Psychotherapist (APACS Singapore) and an Accredited Clinical Supervisor (Australian Counselling Association and Association of Psychotherapists and Counsellors Singapore).

REFERENCES

Ajzen, I. (1991). The theory of planned behaviour. *Organizational Behaviour and Human Decision Processes*, 50, 179-211.

Ajzen, I. & Fishbein, M. (1980). *Understanding attitudes and predicting social behaviour.* Englewood Cliffs, NJ : Prentice – Hall.

American Psychiatric Association (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text revision). Washington DC: Author.

Engel, G. L. (1977). "The need for a new medical model: A challenge for biomedicine". *Science* 196:129-136. ISSN 0036-8075 (print) / ISSN 1095-9203 (web) doi:10.1126/science.847460

Erickson, S. H. (2005). Etiological Theories of Substance Abuse. In P. Stevens, & R. L. Smith, (3rd ed.), *Substance Abuse Counselling: Theory and Practice* (pp. 87-120). Upper Saddle River, NJ: Prentice-Hall.

Erickson, C., K. (2007). *The Science of Addiction: From Neurobiology to Treatment*. New York: Norton.

Koob, G. F. (2003). Alcoholism: Allostasis and beyond. *Alcoholism: Clinical and Experimental Research*, 27, 232-242.

Leshner, A. (1997). Addiction is a brain disease and it matters. *Science*, 278 (5335), 45-47. doi: 10.1126/science.278.5335.45

McMahon, M. (2008). Sociology of Addiction, Deviance & Social Control, EBSCO Research Starters, Academic Topic Overviews.

Newlin, D. B., & Strubler, K. A. (2007). *The Habitual Brain: An "Ada*pted habit" Theory of Substance Use Disorders. Informa Healthcare, 42,503-526. doi:10.1080/10826080601144606

Ong, T. H. (1989). *Drug Abuse in Singapore – A Psychosocial Perspective*. Singapore : Hillview Publications.

Osman, M. M. (1998). Predicting rehabilitated or relapsed status of Malay drug addicts in Singapore: The role of familial, individual, religious and social support factors (Doctoral Dissertation). UMI Dissertation Services.

Peele, S. (1985). *The Meaning of Addiction; Compulsive Experience and Its Interpretation*. Lexington: Lexington Books.

Prochaska, J. O., DiClemente, C. C., Norcross, J. C. (1992). In search of how people change. Applications to addictive behaviours. *The American Psychologist*, 47:1102.

Stepney, R. (1996). The concept of addiction: Its use and abuse in the media and science. *Human Psychopharmacology*, 11, S15-S20.

Tiffany, S. T. (1990). A cognitive model of drug urges and drug-use behaviour: Role of automatic and nonautomatic processes. *Psychological Review*, 97(2), 147-168.

West, R. (2006). *Theory of Addiction*. India : Replika Press.

Publication four

Shanmugam, P. K., & Winslow, M. (2012). Evaluation of the Facilitated In-house Recovery Education (FIRE) Treatment Programme for Substance Abusers. *Journal of Counselling Australia*, 12 (3), 12-15.

The paper was published in a widely read Journal in Australia mainly by practitioners and conference attendants

22 views and 5 downloads on Academia.edu

Peer reviewed article

Evaluation

of the Facilitated In-house Recovery Education (FIRE) Treatment Programme for Substance Abusers

WE CARE Community Services Singapore
Prem Kumar Shanmugam and Associate Professor Munidasa Winslow

Abstract

Introduction and Aims

This study is an evaluation of outcomes of an integrated psychosocial treatment programme – Facilitated In-house Recovery Education (FIRE). FIRE is conceptualized based on the psychological and social models influencing substance dependency. These models are driven by three theories mainly: Social Learning Theory (Bandura, 1977), Theory of Planned Behaviour (Ajzen, 2002; 1991; 1987) and The Allostasis Theory (Koob 2003). The main goal of treatment is to assist substance abusers who have experienced incarceration achieve recovery from dependency with the aid of psycho-educational topic discussions and structured group counselling sessions. The research objectives of this evaluation are: to identify if psycho-education discussions and structured group counselling assist in creating an awareness of the negative repercussions of substance abuse and dependency, to examine the reduction of negative emotional states of depression, stress and anxiety among the participants after they attend FIRE.

Design and Methods

The outcome of the research study is measured by; achievement tests conducted at pre and post treatment and the Depression, Anxiety and Stress Scale (DASS21) (Lovibond & Lovibond, 1995). Twenty eight volunteers (N=28) diagnosed with substance dependency were identified from Halfway Houses meeting the pre-determined inclusion criteria. A pre and post within subjects design was employed as the methodology with the three month treatment programme. The repeated measures t-tests was used for statistical analysis with the application of the Predictive Analytic Soft Ware (PASW), formerly known as SPSS Statistics 17 (Statistical Package for the Social Sciences) (Kinnear & Gray, 2010).

Key words: substance abuse, treatment programme, depression, anxiety and stress.

Introduction

Cottler (1993) described substance dependents as having a behaviour, which they have impaired control over. This behaviour leads to harmful consequences while causing severe medical, psychological and social harm (West, 2001). The impulsive conducts gradually become a harmful pattern of abuse and the dependents find themselves unable to stop the behaviour on their own (Heather, 1998). Miller and Carroll (2006) explain substance dependency as a product of interaction between various models and may not be solely dependent on one particular model.

While West (2001) defines a model as 'a coherent representation of key elements of a structure and system and is thus more descriptive than explanatory' (West, 2001, p. 3).

Substance use disorders have been known to coexist with specific psychiatric disorders (Majumder, Moss & Murrelle, 1998). There appears to be a high comorbidity between mental disorders and substance dependence (WHO, 2004). 53% of people with substance use disorders (except alcohol) suffer from at least one other mental disorder (Harrison, Virginia & Prochaska, 2006). Social anxiety has also been known as distinctive among substance dependants who tend to view themselves as being chastised by others, fear rejection, focus on internal representations of 'self-viewed by others' and lack social skills, thus bringing much distress upon themselves (Avants, Margolin, Kosten, Bounsaville & Schottenfeld, et al., 1998). Avants et al., (1998) also discuss substance dependents as being vulnerable to the influence of the dominating members of their social network, as they are persuadable, easily conform (Watson & Friends, 1969) and fear being rejected by their peers (Avants, et al., 1998). Avants et al., (1998) in their study with socially anxious high risk taking drug addicts concluded that "socially anxious individuals could be hypothesized to benefit from psychosocial treatments designed to help them improve their social skills and to develop alternative coping mechanisms....." (p. 930). This extensive evidence created the strong drive and need to evaluate the FIRE psychosocial treatment programme as the goals of FIRE is to reduce the negative emotional states of depression, anxiety and stress while increasing knowledge of the negative repercussions of substance dependence. This proposal is thus an evaluation study of the FIRE programme and not so much as to prove the efficacy of treatment.

Facilitated In-house Recovery Education

FIRE is derived and based on the psychological and social models of substance dependency. For the purpose of this study, the biological influence, as originally proposed by Miller and Carroll (2006) is not incorporated. The researcher proposes to evaluate the outcomes of FIRE on substance dependency and it may not be possible to measure the biological influences. The programme is conducted by WE CARE Community Services Singapore. WE CARE is the only drop in centre treating substance and behavioural dependents in Singapore. It was incorporated in 2005 as a not for profit organization. Psychosocial treatment programmes and counselling sessions are held daily in the centre by addiction counselling trained professional staff.

FIRE integrates both psycho-educational and structured group counselling sessions as part of the treatment. Nineteen short lectures are utilised to deliver the educational components on the negative repercussion of substance dependency over a period of three months. Each session lasts for two hours incorporating a brief lecture followed with a structured group counselling session. During the sessions, psychological and social influences leading to and reinforcing substance dependency are discussed. It is expected that the awareness of the high risk factors and its repercussions would trigger change intentions for participants. Participants are encouraged to discuss the common stressors that may be high risk to them while deliberating alternative coping responses. Cognitive appraisals of the psychological influences are reviewed and 'distorted' views are discussed and replaced with healthier cognitions. On the other hand, the structured group counselling sessions are used as modelling techniques for participants to share each other's positive appraisals.

FIRE incorporates resilience-building characteristics by instilling social bonding, social control and peer monitoring in the participants. Facilitators stress on the development of positive relationships with the emphasis on trust and honesty. Coping mechanisms, which are more locally inclined, are discussed and brainstorming opportunities are encouraged through structured group counselling sessions. The assistance of local support networks is discussed and contacts are provided. Some of the more prominent recovery support agencies are: Singapore After Care Association (SACA) – where ex-convicts can seek temporary assistance in obtaining employment; We Care Drop In Centre – where substance dependent people can seek counselling, moral support and are able to attend self – help groups to fit into the recovering social network; Singapore Anti-Narcotics Association (SANA) – where substance dependent people in recovery can seek assistance for employment, housing, temporary financial assistance and counselling services.

Method

Participants

Twenty eight participants were identified from halfway houses. The inclusion criteria were: (i) served prison or drug rehabilitation sentences under the misuse of drugs act or served LT1 (a minimum of five to seven year prison sentence), (ii) experienced relapses with substance dependency (iii) able to converse and write in English and have a minimum of Primary Six education, (iv) received a principal DSM-IV-TR (American Psychiatric Association, 2000) diagnosis of dependence and (v) free of any acute co-morbid disorders.

> FIRE incorporates resilience-building characteristics by instilling social bonding, social control and peer monitoring in the participants. Facilitators stress on the development of positive relationships with the emphasis on trust and honesty.

Design

This evaluation study will adopt a pre and post, within subjects approach to evaluate treatment outcome of the FIRE programme (which is the independent variable) on the dependent variables: (i) reductions in the self-reported levels of depression, (ii) reductions in the self-reported levels of anxiety (iii) reduction in the self-reported levels of stress and (iv) knowledge gained on the negative repercussions of substance dependency. Pre and post treatment measurements will be conducted individually on the participants of the FIRE treatment programme and the results will be evaluated to measure the significance of treatment.

Materials

The Depression, Anxiety and Stress Scale (DASS21) (Lovibond & Lovibond, 1995) to measure the self-reported levels of depression and stress and the achievement test to measure knowledge gained on the negative repercussions of substance dependency.

Pilot study

A pilot study with sixty volunteers was conducted to ensure the measurement tool was valid and reliable to be administered with the local population. Results of the pilot study revealed high internal consistency (Depression, Anxiety and Stress Scales revealed high internal consistency with Cronbach's alpha, .87, .76 and .78 respectively). Participants declared that questions on the measurements were easy to understand and they were able to answer them without any help.

Results

The mean latency for depression pre-treatment (M=13.18, SD=10.92) was greater than the mean for post treatment (M=8.53, SD=6.71). A paired sample t test showed significance beyond the .05 level: t (27) = 2.45; p = .02 (two tailed).

The mean latency for anxiety pre-treatment (M=6.0, SD=4.20) was greater than for post treatment (M=5.68, SD=4.05). A paired sample t test did not show significance beyond the .05 level: t (27) = .441; p = .66 (two tailed).

The mean latency for stress pre-treatment (M=14.93, SD=10.33) was higher than for post treatment (M=11.71, SD=8.16). A paired sample t test did not show significance beyond the .05 level: t (27) = 1.35; p = .19 (two tailed).

The mean for the achievement test pre-treatment on the other hand, (M=12.11, SD=3.14) was lower than for post treatment (M=17.10, SD=2.74). A paired sample t test showed significance beyond the .05 level: t (27) = -8.07; p = .00.

Discussion

Overall the evaluation study seemed to reveal reductions in the self-reported levels of depression and an increase in the knowledge acquired on the negative repercussions of substance dependence.

The findings revealed that there were no significance in treatment for the self-reported levels of anxiety and stress. However the mean for both anxiety and stress levels were higher pre-treatment when compared to post-treatment. This could be due to the fact that treatment was only for a short period of time before any actual impact on anxiety and stress could take place.

Limitations of the study

One of the limitations of the study was participant size. A larger population could have helped make the results more generalizable but as this was a programme evaluation, results are helpful for fine tuning the programme further.

Other limitations are that the measurement tools were self-administered, participants consisted of a mixed group with various demographics and educational levels.

Inclusion of a control group would have helped enhance validity of the results obtained from the study. The changes observed could have been influenced by extraneous variables which were not controlled.

Acknowledgements

This work was supported by a grant from the Yellow Ribbon Fund of the CARE Network of Singapore. The CARE network was set up in 2000 after recognising a common goal to aid and rehabilitate ex-offenders by pulling resources and expertise.

References

Ajzen, I. (1987). Attitudes, traits and actions: Dispositional prediction of behaviour in personality and social psychology. In L. Berkowitz (Ed).), Advances in experimental social psychology, 20, 1-63. New York: Academic Press.

Ajzen, I. (1991). The theory of planned behaviour. Organizational Behaviour and Human Decision Processes, 50, 179-211.

Ajzen, I. (2002). Perceived Behavioural Control, Self-Efficacy, Locus of control, and the Theory of Planned Behaviour. Journal of Applied Social Psychology, 32, 665-683.

American Psychiatric Association (2000). Diagnostic and statistical manual of mental disorders (4th ed., text revision). Washington DC: Author.

Avants, S. K., Margolin, A., Kosten, T. R., Rounsaville, B. J., & Schottenfeld, R. S. (1998). When is Less Treatment Better?; The Role of Social Anxiety in Matching Methadone Patients to Psychosocial Treatments. Journal of Consulting and Clinical Psychology, 66(6), 924-931.

Bandura, A. (1977). Social Learning Theory, New York: General Learning Press.

Cottler, L. B. (1993). Comparing DSM-III-R and ICD-10 substance use disorders. Addictions, 88, 689-696.

Harrison, S., Virginia, C., Prochaska, J. O., (2006). Alcohol and Drug Problems: A Practical Guide for Counsellors. Centre for Addictions and Mental Health, Pan American Health Organization / World Health Organization. Retrieved from http://www.camh.net/publications/resources_for_professionals/alcohol_and_drug_problems/ADP_table_of_contents.pdf

Heather, N. (1998). A conceptual framework for explaining drug addiction, Journal of Psychopharmacology. 12, 3-7.

Kinnear, P. R., & Gray, C. D. (2010). PASW 17 Statistics Made Simple: Replaces SPSS Statistics 17. Madison Avenue, NY : Psychology Press.

Koob, G. F. (2003). Alcoholism: Allostasis and beyond. Alcoholism: Clinical and Experimental Research, 27, 232-242.

Lovibond, S. H., & Lovibond, P. F. (1995). The structure of negative emotional states; Comparison of the depression anxiety stress scales (DASS) with the Beck Depression and Anxiety Inventories. Behavior Research and Therapy. 33, 335-343.

Majumder,P. P., Moss, H. B., & Murrelle, L. (1998). Familial and Nonfamilial Factors in the Prediction of Disruptive Behaviours in Boys at Risk for Substance Abuse. Journal of Psychology and Psychiatry, 39, 203-213.

Miller, W. R., & Carroll, K. M. (2006). Rethinking Substance Abuse; What the Science Shows, and What We Should Do about it. New York: Guilford.in relapse risk situations among adolescent substance abusers following treatment, Journal of Adolescent Chemical Dependency, 1, 95-116.

Watson, D., & Friend, R. (1969). Measurement of Social-Evaluative Anxiety. Journal of Consulting and Clinical Psychology, 33(4), 448-457.

West, R. (2001). Theories of Addiction. Addiction, 96, 3-13. doi:10.1080/09652140020016923

World Health Organization (2004). The world health report 2004; Geneva. The World Health Organization.

2.3 The role of an integrated treatment approach and the psychosocial influences of the family in problematic substance use: Publications five, six, seven and eight.

2.3.1 Background to the publications

Publications five, six, seven and eight focus mainly on the influences of culture and family while relating it to problematic substance use. This section further explores the various psychosocial and cultural dynamics impacting treatment outcomes.

As an Intake and Review Officer in a community centre in Singapore, known as Singapore Indian Development Agency (SINDA), I worked with people mainly from low-income groups who had multiple family issues and underlying reasons related to problematic substance use. I began to appreciate how the presenting problems observed with the families may not be resolved unless the underlying reasons behind them were managed. This experience motivated me to appreciate the various roles and influences within the family, which, by the time of seeking help, had become a dysfunctional system. I observed role-shifting within the family dynamics as a result of the substance use, and co-dependency was a common factor in most of the families. I felt at the time that it was cultural within the Asian context, especially within the Singapore Indian community. I observed distinct characteristics in the families, such as

the strong sense of collectivism as compared to individualism observed in Western families. Amongst collectivist family structures, the family connection is firm, and this turns into the family identity and a defence mechanism employed to protect each other. Very often, any independent behaviour which disrupts or brings dishonour to the family will not be accepted and becomes a family secret. Filial piety is widely practised and essential to Asian families where the elders decide on the rules and norms. Chen, Yan and Chen (2018) suggested filial piety in Chinese societies as culture-specific and based on Confucian concepts emphasizing the importance of how children interact with the elders. Yeh and Bedford (2003) define filial piety as children caring, respecting and honouring their families, stressing the need for the family to maintain the balanced and healthy intergenerational relationship. Unger, Ritt-Olson, Teran and colleagues (2002) explain how cultural values are associated with adolescent health risk behaviours such as problematic substance use. The authors claim that adolescents who have higher filial piety may abide strongly to their parents' guidance, avoiding problem substance use or oppositional behaviour. Familism, on the other hand, is explained as 'sense of obligation to and connectedness with one's immediate and extended family' (Cuellar, Arnold and Gonzalez, 1995 in Unger, Ritt–Olson, Teran et al. 2002, p. 259). High sense of familism in adolescents helps equip them with coping strategies especially when it comes to managing stressors. I realized that I needed to explore further the interrelationship functions and influences within the family which lead to conditioning the dysfunction, how conditioned relationships may sustain or maintain the substance use and how this understanding can be employed in building an integrated treatment approach.

In order to help the family function and regain healthy homeostasis, there appeared the need for an integrated treatment approach which would include the family members and so address family dynamics. We needed to consider a treatment programme based on the biopsychosociospiritual model which employs cultural and family therapy components in order to ensure holistic treatment is afforded.

2.3.2 The impact of culture

Hall and Queneer (2007) discussed problematic substance use not only as a result of biological and psychological predispositions but as a multifaceted condition influenced by culture and society. Miller and Carroll (2006) explain how culture influences the choice of substances and use, and so has an impact on the resulting problems associated with problematic use. Horvath, Misra, Epner and colleagues (2016) propose that in order to treat substance use, a thorough understanding of the culture within the society is helpful. In other words, in order for treatment to be effective, the approach has to be customised to cultural needs.

Giddens (1997) explains culture as customs, dressing styles, religious festivities, habits in a family, customs, preferred occupations and recreational activities. While Giddens' (1997) definition appears to be related to the behavioural aspects of culture, it does not directly reflect the values. Culture can be understood as shared values as well, and Fiske et al. (1998) defined this more usefully as incorporating both behaviour and values – a definition which is more pragmatic when applied to family dynamics. Fiske et

al. (1998) explain culture as inclusive of norms, customs, practices, psychological ventures, education and vocation, influenced by both beliefs and values.

Due to the mixed cultures and diverse ethnicities in SE Asia, acculturation is a common phenomenon. Awde (2009) describes acculturation as changes that result from the adaptation of new values and behaviours when migrants acclimate to the host society. When this happens, the migrants tend to conform and absorb the cultural norms of the host culture, mainly motivated by economic needs, while the cultural values and concepts take a longer to be accepted or altered, as there may not be any financial motivation (Awde, 2009). Vigil (2002) explains this concept referring to how first-generation migrant Asians, while they may start dressing and speaking more like their host culture, may not alter their family values, particularly relating to parent-child interaction. Therefore, from a treatment perspective, there is a need not only to appreciate the culture of the specific society but also the impact of acculturation resulting from the cultural adaption.

Culture difference also presents a treatment issue when applying treatment philosophy from one culture to another. For instance, Summerfield (2008) explained that though mental illnesses are global phenomena, the principal classification for mental health and psychiatric disorders is based on the International Classification of Diseases (ICD) and the Diagnostical Manual of Mental Disorders (DSM), which are

based on Western cultural concepts of mental illness. In order to claim the universality of a particular diagnosis, there needs to be a clear biological cause which is not always evident in Western psychiatry (Summerfield 2008). Kleinman (1995) stated that since as early as the 1970s, ethnographic studies have identified differences between cultures, particularly in the prevalence, presentation and even the prognosis of mental disorders, but are poorly represented in mainstream psychiatric publications. He argues that mainstream literature tends to underrepresent the cross-cultural differences, preferring to stress the similarities (Kleinman, 1995). The current debate suggests that Western medicine philosophy of individualism and Cartesian dualism (a separation between mind and body) does not fit comfortably in cultures of collectivism where the mind/body separation concept does not exist, demanding treatment approaches that incorporate cultural diversity (Gopalkrishnan, 2018).

Therefore, to successfully implement Western science or treatment approaches within the local Asian or specifically the Malaysian context, the approach needs to be not only customized to the specific needs of the population but also to adopt an approach where cultural diversity is in-built into the model used, such as a biopsychosocialspiritual model.

The development of the integrated treatment model employed in Solace, a private international residential treatment retreat in Malaysia, results from a combination of my exposure working with families in and around SE Asia, particularly

Malaysia and Singapore, underpinned by the theoretical models. Appendix B illustrates a schedule of the programme in Solace, in addition to family interventions.

2.3.3 The evidence base for the contents of the workbook (Publication 6)

The workbook learning material is based on existing evidence of developmental and family dynamics. Akram et al. (2014), in a systematic review, concluded that evidence exists for family-based interventions improving substance use and relationship-based outcomes. Parenting itself interacts with psychological well-being, stressors in life and even social support in predicting substance use (Yoshikawa, 1994). Thus, interventions for working with families with problematic substance use issues are based on the knowledge that family plays a crucial role in helping children adjust to the demands of the environment (Velleman, Templeton & Copello, 2005). Delinquent behaviours develop later on in life when there is inappropriate socialization at home which often becomes a predictor of later problematic substance use (Gittelman et al. 1985; NIDA, 1997; Robins, et al. 1990; Quay, 1987).

The relationships described between family and the substance user, where co-dependent people repeatedly engage in painful relationships, is explained with learned helplessness (Seligman, 1975), while Trauma Bonding (Carnes, 1997) describes how fear mobilizes and seduces the family member into accepting the trauma as a means of survival. Co-dependency is described as a bond between the addicted person and the

co-dependent while the characteristics of this group of people are similar to trauma bonding (Carnes, 1997). The workbook perhaps could be supported by a practitioners' manual that provided the evidence base.

'When one member of the family changes' (Publication six, pg. 20) describes how family homeostasis is achieved while roles among family members shift as a result of problematic substance use. The typical symptoms described are adapted from family systems theory and based on practice examples, and is an example of the adaptation of the theories to the Asian context.

2.3.4 Mandalas and psychosociocultural treatment

The second part of the workbook, pages 41 to 75, comprises mandalas to be coloured depicting the concepts discussed throughout the workbook. This colouring technique creates an interactive flow to the workbook while allowing the reader to engage and become absorbed in the ideas. There is growing adoption of adult colouring books, which are often claimed to have therapeutic effects. A study by Jayde et al. (2017) showed a reduction of anxiety and stress and an increase in mindfulness scores associated with colouring books used as therapy. However, in that study, mindfulness was also associated with the control condition of the use of puzzle books. This suggests that the act of focusing mentally itself has an effect on concentration and awareness. There appears currently to be no clear evidence supporting the effect of using mandalas per se for mindfulness or reduction of anxiety, however, Mantzios and

Giannou (2018) found no significant difference between mandala colouring and free-drawing, but found some evidence that directed mandala colouring increased mindfulness. The aims of the workbook are more focused on psychoeducation, provided in a culturally acceptable and enjoyable format, therefore it was identified that this element needed to be evidenced in publication seven, an evaluation study of the workbook.

Mandalas are employed in Tibetan Buddhism to focus attention, meditation and trance induction. Mandala is a Sanskrit word meaning 'circle', referring to the centre as being sacred, and possessing the ability to release cosmic power (Buchalter, 2013). Fincher (2014) states that mandalas were introduced into Western psychology by Carl Jung. Jung (1948/1969) who claimed that the circles were instinctive when probing and drawing on inner unconscious thoughts, especially when experiencing intense personal growth. Fincher (2014) further explains mandalas as being an expression of inner reality of the individual, while Fontana (2005) explained how the mandala aids deeper awareness, allowing the person to gain a sense of cosmic oneness. The various definitions and usefulness of the mandala seem to be more spiritual than psychological, so appearing to be a good option to employ at Solace, more so since Fontana (2005) claims that mandalas have spiritual compatibility to the Asian culture.

Beckwith (2014) indicates that meditative practices are often employed in Western substance use treatment as an alternative therapy and found mindfulness-based therapies and mandalas to aid relapse prevention among adolescents. The use of

mindfulness-based therapy is also helpful in problematic substance use by promoting non-judgmental acceptance of thoughts while responding to cravings and triggers with awareness (Marcus & Zgierska, 2012). Marcus and Zgierska (2012) and Buchalter (2013) explain that mindfulness can assist the individual to recognize the changes taking place within themselves instead of suppressing or ignoring them. Young et al. (2011) describe meditative practices as an essential part of substance use recovery. Use of mandalas, as a form of meditative practice, is an alternative therapeutic tool helping reduce levels of anxiety among clients, while focusing on expressing feelings, emotions, hope, fear and dreams (Buchalter, 2013). Beckwith (2014) describes mandalas as having the ability to improve creativity and concentration and clients can keep going back to their mandala to reflect on what it meant, and process the emotions.

As evidenced, mandalas are being widely used and researched in the West. The number of publications on mindfulness and mandalas has grown and increased its evidence-base for practice (Beckwith, 2014). It is intriguing to witness a personal development approach originating in Asia now being evidenced for effectiveness among Western populations. The challenge maybe now to examine how well Western evidence may still apply to Asian cultures from which it originates. It demonstrates that cultural drifts, explained as spreading of cultural traits during an era (Merriam-Webster, 2020), to take place when a concept is used and translated into a different culture.

2.3.5 Impact of this work

It is becoming more evident that the Western adoption of mindfulness appears to be driving the interest in mindfulness-based treatment approaches. Though this form of alternative treatment has its origins from the East, Western endorsement seems to guide the globalization of the substance use treatment approaches. At the time of writing this thesis, the workbook was presented and distributed at eight conferences and several seminars in countries around the globe and well received by the participants (See Appendix A for list), with more planned for 2020. The Erada international treatment facility in Dubai requested to be trained in family therapy and the integrated treatment approach employed in Solace after being exposed to the workbook at a conference in Dubai. The Clinical Director from Erada invited me to conduct a workshop for the clinical team to expose them to the integrated treatment approach. At the time of completing this thesis, plans for long-term supervision and training programme was in discussions with Erada. There have also been requests for another workbook with more pages comprising the mandalas. I believe that the Western adoption of mindfulness and the use of mandalas has sparked the interest of these audiences. Findings from the evaluation of the workbook in publication seven will be applied to a second edition.

2.3.6 Impact of publications seven and eight

Publication seven reports findings from an evaluation study of the workbook with an aim to make improvements on its usability and impact.

One of the key findings from the evaluation study was how the participants' belief system had changed as a result of gaining an understanding of the disease model. The concepts of the biopsychosociospiritual model discussed in the workbook had an impact on the overall acceptance and understanding of substance dependency and its influence within the family structure. Participants in the treatment facility were mainly Malaysians thus culturally homogenous, making the findings from the evaluation study more applicable to the local population. As there is widespread popularity of mindfulness and mandalas within the Western society, it could be that the workbook will have a positive impact on the Western population as well and could be tested through application in a Western setting or with Western clients. The findings from the evaluation revealed an increase in knowledge acquired as a result of the workbook but it was not possible to measure the application of the knowledge gained in practice at home. I intend to conduct a follow-up study one year from this evaluation to identify if (i) the knowledge is being applied and (ii) there is sustainability in the learning acquired. I believe this would add weight to the current findings and strengthen the evidence for this workbook approach to the application of culturally adapted approaches to the biopsychosociospiritual model that accommodate family and spiritual factors.

Publication eight is a discussion and review paper presented to encourage and identify more person-centred treatment approaches in Malaysia in order to develop a recovery-oriented philosophy in the country. The paper introduces the multi-ethnic background to Malaysia's population and identifies reasons for the shift towards person-centred treatment approaches as being poor treatment access, policy change from detention and forced rehabilitation, high relapse rates, and the rise in HIV cases in the Community Drug Detention Centres (CDDC). Findings from the review identified human rights violations in the centres (Khan et al., 2018) and compulsory treatment for drug users who may not be dependent (Werb et al., 2016). The paper also highlights a recent lack of evidence-based treatment (Amon et al., 2013; Tanguay, et al., 2015). These findings underline the need for more humane and person-centred treatment approaches to meet the culture-specific needs of this population. In order to manage the growing substance use issues, the policies in Malaysia evolved from a harm reduction, mainly opioid substitution therapy, needle and syringe exchange programme (Reid et al., 2007), to free voluntary treatment with no legal implications (Tanguay, 2011). The Cure and Care centres (C&Cs) were a result of this transition into voluntary treatment from the CDDCs.

This shift away from punitive policies became more obvious recently with the announcement made by the Minister of Health in Malaysia announcing the removal of criminal penalties and decriminalizing drug possession for personal consumption (Zubir, 2019). This means that problematic substance use will be seen as an illness requiring treatment. At the current time, there are 70,000 people incarcerated in Malaysia with

some form of problem substance use (Zubir, 2019). Practitioners and academics welcomed this move (i.e. Informal Drug Policy Dialogue Report, 2018) but it may take a while before meaningful implementation of the processes can take place. We are already witnessing opposition from some of the peacekeepers in the country including law enforcement agencies.

The discussion section of publication eight introduces how treatment approaches in Malaysia have evolved and yet mirror those of the West while psychiatric disorders are still diagnosed based on Western concepts and influences. Razak (2017) stresses the need to adapt and embrace spiritual and traditional concepts along with Western medicine in order to achieve a holistic treatment approach. Malaysia is still at an infancy stage in achieving culture-specific treatment approaches, but the frequent shifts in policy over the years does reflect a willingness to accept change. There have been policy and practice changes from zero tolerance to disease model approaches recently, so another change may take need time and evidence to develop.

2.3.7 Overall impact of the publications five, six, seven and eight

Publications five and seven link theory to practice focusing on the impact of family and problem substance use mainly on the psychosocial aspects in the family. The easy-read style with a non-jargon approach allows for a dissemination of the theory and evidence for practice to non-academics and family members. Findings from publication

five became the motivation for the workbook (Publication six) which was very much influenced with my own work as a clinician incorporating culturally adapted approaches to the biopsychosociospiritual model that accommodates family and spiritual factors.

Though most of the practice-based theories and definitions in publications six and seven are based on underpinning biological and behavioural treatment evidence, they also highlight the lack of culturally and spiritually adapted approaches within the Malaysian treatment-seeking population. They support my own view of the need to widen the evidence base to not just biological explanations but psychosociospiritual domains that are more influenced by social and cultural differences.

Publication eight provides an up to date review of the state of drug treatment in Malaysia, and outlines how the treatment approaches in Malaysia have evolved to the present day and explores treatment literature relevant to Malaysia. Findings from this exploration, though not specific to the biopsychosociospiritual model, reflect how treatment has been shaped as a result of research findings. The limited number of published papers in Malaysia clearly indicates the need for more research-based dissemination which would encourage adapted treatment approaches, especially for families and substance users. The Journal of Substance Use (JSU) was chosen for this publication as it has an international readership and global reach. With a growing interest in global health (i.e. via WHO sustainable development goals WHO, (2019)) global dissemination shares and supports evidence and knowledge exchange between academics and practitioners. Therefore, there is the intent in this publication to

encourage more interest in developing integrated treatment approaches transnationally, especially in LMICs such as Malaysia.

The publications discussed in this chapter have not only evidenced the need for culturally adapted approaches and evidence production in line with research objective three, but they have also provided an indication of the future direction of research needed.

Publication five

Shanmugam, P.K. (2015) The Family – Responding To A Disease of Emotions. *Intervene Magazine*.

The paper was published in a widely read Journal in UK and globally mainly by practitioners and conference attendants

The Family – Responding to a disease of emotions

Prem Kumar Shanmugam examines the concept of addiction as a family disease. Part 1 of this two part series discusses how family members respond to the disease and introduces the concept of codependency.

We realise today that shame and guilt can become the driving forces for people (both the individual and the family) suffering from the disease of addictions. These groups of people struggle to respond to emotions in a healthy manner and very often turn to addictions or codependent behavior in order to manage the perceived pain. Not only do drugs and compulsive behavior numb the emotions almost immediately but the "affect " also provides immediate gratification. That helps us understand the disease of addiction from psychological perspective of the disease model but what about the family member? What about the loved one who is displaying signs of compulsivity with the emotion as a result of the addiction? Are they addicts as well now as a result of the addiction?

Here we shall start to introduce the concept of codependency and later on I will employ two other theories: ***Learned Helplessness*** and ***Trauma bonding*** to help define this approach. I feel strongly that both these theories have something very much in common and a strong hold in families of people suffering from addictions and we will discuss this in detail.

Family members "saving the addict"

In my practice I find I am able to almost immediately pick out signs and symptoms of the disease inflicting the family. Very often we get into discussions about assertiveness and using "tough love" to get someone into treatment. Of course this concept is something new and the families struggle with it.

"How can I not give him money when he asks for it? He will then go out and steal or borrow from other people? What if he starves on the streets?" The family member's cognitions become so distorted they do not see that they are actually conditioning the addictions further by providing the money. They are allowing the disease to manipulate itself further into the family system. The family is permitting the addiction to manifest further not realising that even if they don't provide the money, their loved one will still continue with the addiction. My favorite response to situations like this would be "Sounds like your loved one is parenting you well…." I normally get some silence followed by a surprised look before a response is heard. Very often we hear how family members repeatedly keep bailing their loved ones out of trouble as a result of their addiction and family members feel guilty or responsible for their loved ones actions. "I should have spent more time with him when he was young…" "I was too busy focusing on working and neglected him.." etc. What they fail to understand is that addiction is a disease and they are simply feeding it. Some people are just predisposed to this disease as a result of deficiencies in their brain, specifically the reward system.

As a result of the continuous codependent behavior, unhealthy response systems are conditioned, allowing the addict to continue with the addiction. Cognitions become distorted and relationships fade away ultimately affecting the individual's spirituality . The addict continues to numb his/her emotions, which are soon perceived as being overwhelming, and people just do not want to feel anymore.

What I find equally interesting is that not only are people parented when they are growing up by their families but as adults, parents are "parented" by their loved ones as well. The concept of codependency is not only a result of childhood upbringing but also "adulthood upbringing" as well. I believe that this is due to the "power of the addictions" and the hold it has on the family. Families function as a unit and the main purpose is to keep the unit intact. The dynamics of the family evolve to ensure the functioning of the family continues immaterial of the resulting dysfunction.

John Bradshaw in his book The Family; A new Way of Creating Solid Self Esteem, describes families as a system. He says that wholeness is the first principle of the system. "…the whole is greater than the sum of its parts. This means that the elements added together do

not produce the system. The system results from the interaction of the elements. Without the interaction, there is no system. " (p. 28)

Bradshaw (1996) describes the second characteristic of the system as the relationship. Families have connecting relationships with each other, when trying to understand the family as a system it is important to appreciate the connections between the individuals. "Each is partly a whole and wholly a part. Each person within the system has his own unique systemic individuality and at the same time he carries an imprint of the whole family system. I am my family as well as a person composed of whatever unique characteristics I have actualised as a person." (p. 28)

There is a strong bond that keeps the system functioning. The objective of the family system is to continue functioning. Especially when the "addiction virus" intrudes into the system, members take on roles to protect and keep the unit intact. Though the objective is the same, it manifests into something unhealthy as now the addictions is allowed and even further reinforced by the new unhealthy roles.

Codependency

Codependency is a concept that describes the dysfunctional relationship or behavior of supporting or enabling another individual's addiction, unhealthy behavior, poor mental health or immaturity. Very often also known as 'relationship addiction', people who are codependent end up in relationships that are not only destructive to themselves but also to the other parties as well.

Codependents tend to react to certain emotions with much exaggeration. Their responses to normal emotions such as guilt or shame can be so overwhelming to themselves that they are constantly anxious and sometimes appear irrational. Emotions like joy can appear to be feelings of elation and they tend to act out more than actually appropriate. Simple daily struggles appear like the end of the world is near. An argument or debate may seem like a threat or challenge.

As we have seen above, codependency causes roles to shift while the family continues to evolve. The bond is so strong that it enables each other into achieving their own selfish needs and generally people tend to appear 'addicted to each other". The addict continues to numb his emotions with the substance or compulsive behavior while the codependent numbs his emotions with the relationships with the addict.

The concept of codependency was first observed in families of alcoholics. The family members were constantly faced with shame, fear and anger. They could not do anything about the alcoholic and were constantly fixing all his problems. The main focus of the family would shift to his addiction while the rest of the family members were unable to manage their own emotions. When there was too much of pain and shame, the focus was on keeping the addict happy thinking that would help, which of course conditioned the addiction further. This became a vicious cycle, making the addict happy, neglecting self in the process, continuing to please the addict; allowing the addiction to "blossom" and fulfilling, the now, codependent's own needs (numbing emotions).

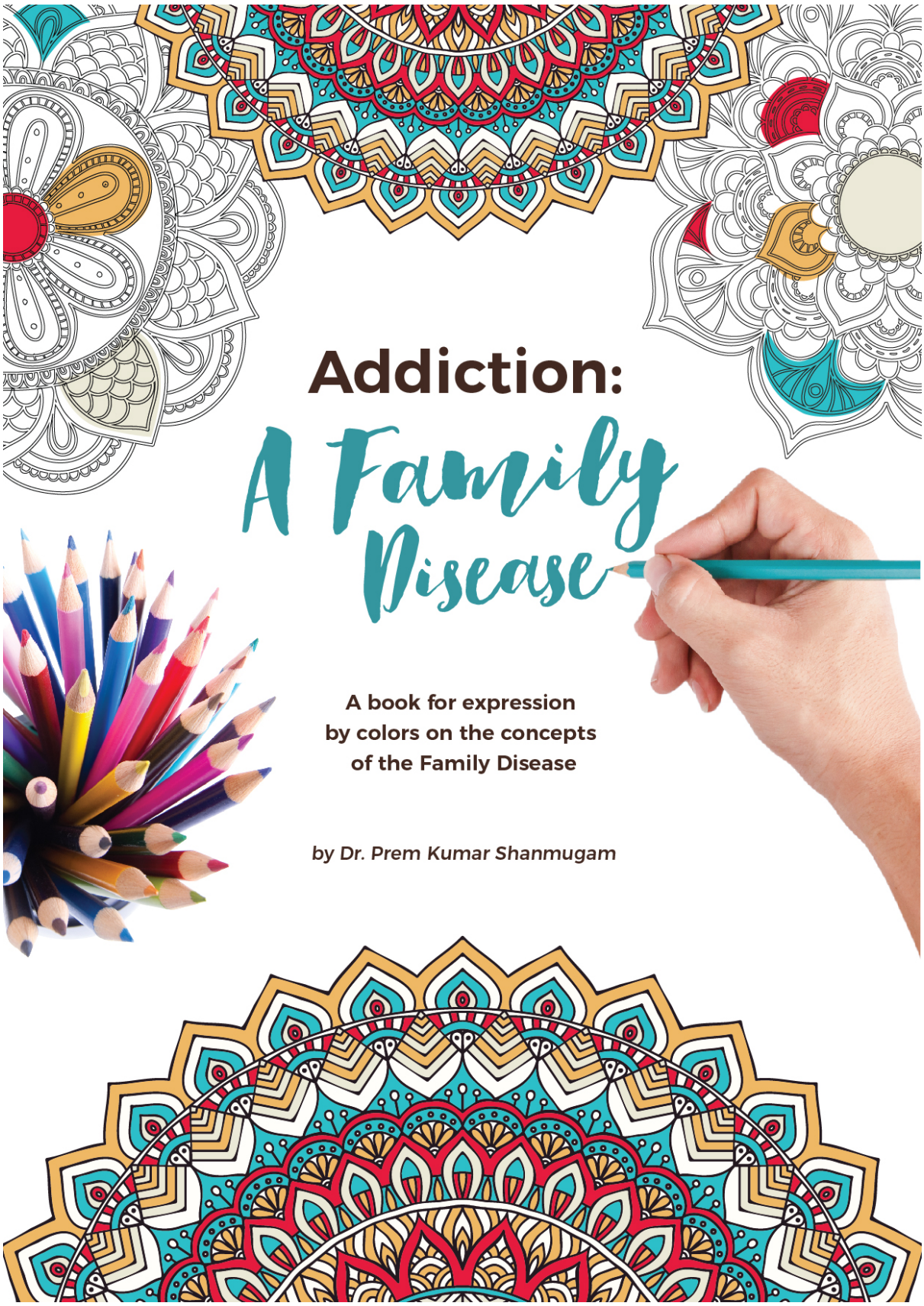
The conditioning continues while the relationship becomes dysfunctional. The codependent needs the addict to function and will even sabotage any recovery in order to "function". Just like addiction, Pia Mellody, refers to codependency as a disease. Mellody claims that codependent people tend to put on an act and try hard to present themselves in any way that will allow them to receive constant approval. They need to feel wanted and important but are actually suffering in pain from intensified feelings of shame, pain, fear and anger (Mellody, 2003).

The question that should be coming to mind now is that, "So when and how do people actually become codependent?" It sounds like the addictions causes dynamics to shift within a family and therefore roles change as a result, and as we now understand, the shift takes place in order to maintain the family and continue functioning. Or do codependents already exist even prior to any form of addiction triggering it and the codependency blossoms when there is an addiction involved? This would mean that some people are predisposed to becoming codependents for some reason. If so, we need to look at what leads people to become codependent when there is no addiction involved in the process and how they are able to manage this form of "addiction".

Publication six

Workbook - Shanmugam, P. K. (2016). Addiction: *A Family Disease. A book for expression by colours on the concepts of The Family Disease*. ISBN: 9781365676208. Gillin Printers: Kuala Lumpur, Malaysia.

Five hundred pieces of this this workbook have been printed and about 300 distributed at various conferences and training events. Fifty workbooks were purchased by another substance misuse treatment facility in the United Arab Emirates for their staff.

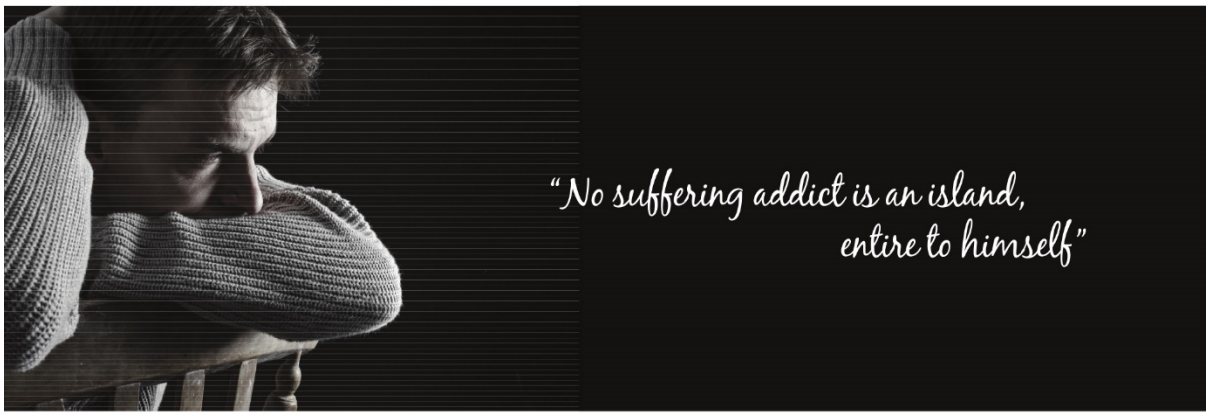

Addiction:
A Family Disease
A book for expression
by colors on the concepts
of the Family Disease
by Dr. Prem Kumar Shanmugam

Acknowledgement

I would like to personally thank all the families who had courageously shared their journeys and struggles with me. I have learnt much from all of you and this has encouraged me to complete this book. Your trust in practitioners like myself has helped us all mature and appreciate this disease better.

Conversations, case conferences, meetings and exchanges with colleagues and fellow practitioners on how to treat clients better, has been instrumental in providing insights on the "family disease model' in addictions. I am personally indebted to all my colleagues in Solace, particularly the marketing department for their patience in ensuring this book materializes.

Finally, I would like to thank my family who has endured this disease and matured throughout the experience. Thank you for never giving up on me.



Operational Definitions

Self-Medication— People suffering from addictions have a problem in feeling rewarded by natural things in life. This is a result of the deficiency in the reward system in the brain. These groups of people are unable to function without the drug of choice. Initially the substance or compulsive behavior serves the purpose of 'self-medicating" to feel "normal" but once tolerance builds the need for more increases and control is lost.

Numbing-Avoidance of Feeling—People with addictions seem to have difficulties responding to emotions appropriately and often prefer to numb their emotions. Addiction is sometimes also known as a "disease of emotions". Almost every emotion is numbed or anesthetized with the substance and with continued abuse they need to relearn how to respond to their emotions in the right manner. There also are psychosocial factors that predispose people to avoiding expressing how they feel such as upbringing and environmental exposure.

Codependency—This is a form of addiction by itself. Codependents try to numb their feelings by fixing, thinking for, reminding, and acting as the conscience of the addicted person and in some cases just people around them. The codependent can be more in touch with the other person's life than his or her own. They learn this survival skill usually by either growing up or living in a family that has addiction or is dysfunctional.

Quick Fix Mentality— Addiction is an impulse control disorder. These people are unable to control their impulses to act when exposed to the drug of choice. They are used to "fixing" their uncomfortable feelings with their addiction. As a result, they expect change to happen fast and have difficulty waiting for things or to progress over time. That is one of the reasons relapse is so common even though they are unable to withstand the painful/ uncomfortable feelings that occur with withdrawal. At a rational level people with addictions are aware of the negative consequences but the organic inability to delay gratification is so powerful that even the consequences are not enough to act as a deterrent.

In family psychiatry, family is not regarded as a background to.....help the present patient along. Family psychiatry accepts the family as the patient, the presenting member being viewed as a sign of family psychopathology... ***(Howells, 1963, pp. 4 - 5)***

My initial years of professional training were in the field of counseling. I recall working in the community service centers in Singapore where I was exposed to various types of issues. Family members came seeking help for financial, domestic violence, school, and education related issues among other things. It was an excellent training ground for a budding mental health worker to gain sound experience and exposure.

We provided the support the families needed in order for them to get back on track. Among the various families and presenting problems I worked with the ones that fascinated me most were families who had members battling addictions. The presenting issues by the families were everything else except the addictions. It was seldom I would hear a family member seeking help, say that her husband, brother, wife, or son; had an addiction issue; and that was why they came for assistance. After a while, I was able to see common symptoms or characteristics in these families. There were familiar roles the family members took on and scripts that they would employ.

There was almost always financial burden with unpaid bills; the breadwinner becomes unable to work or function - possibly some problem with the law, children traumatized, unable to attend school or in some cases living with other family members. One of the first few incidences which truly made me jump was when a 35-year-old lady came in seeking financial assistance.

Jane (not her real name) was married with 3 school going children. She worked in a restaurant as a dishwasher earning enough to help the children with their daily school pocket money. She was also able to send her children for tuition and made sure they had all the textbooks they needed for school. I was tasked to meet Jane the day she came in as I was the duty officer. She filled up all the necessary forms and appeared rather tired and dull. I asked her what we could do and Jane said she needed financial aid for the home as there were unpaid bills accumulated over a few months' period.

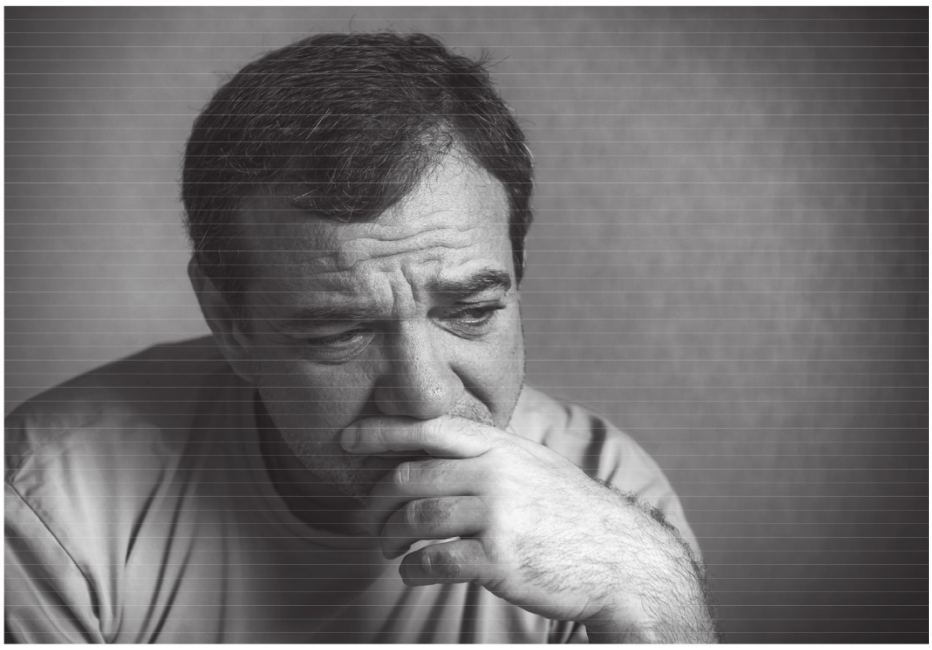
Upon questioning, I realized the family had a reasonable income until very recent and I asked why that was. Jane mentioned that her husband, who was a truck driver, was stopped from work as the law revoked his driver's license. This made me curious as truck drivers earn a good income in Singapore. Upon further probing, Jane mentioned that her husband was stopped by the police and found to be driving under the influence of alcohol and subsequently charged in court. I went on to question her on how regular he drank and if it was a problem at home. (Thinking back now, I realize that Jane's response is what got me motivated and curious into the concept of codependency).

"I have a wonderful family and husband. He works hard and that's why he needs to drink alcohol every day. Though he is drunk every evening and hits me, it is mainly my fault. I am sometimes lazy and am late to provide him food. He does not beat me on Saturdays though. I need to take care of myhusband's needs. I need to be a good wife."

Of course, the sessions went on after that with me probing and trying hard to get Jane to see that she was not the problem. In fact, we went on to meet for a few sessions after that but her belief system was deeply embedded. Jane had a very negative core belief about herself and her role within the family dynamics.

Emotions were all mixed up and relationships sounded enmeshed within the family. The core driving emotions were mainly shame and guilt; and somehow or rather the family appeared to be functioning within this dysfunctional dynamics.

Responding to Emotions



Emotions or feelings are a part and parcel of the human make up. We tend to feel and respond in various ways to emotions. Human beings have learned to react in various ways as a result of their upbringing and expectations of society. Healthy responding is a positive experience. Pia Mellody in her book, Codependence No More, describes the various emotions as having a specific purpose:

Joy gives people hope and a sense of abundance. "I have all that I need".

Passion provides people with the energy or drive to motivate them to survive and create.

Love is described as a sense of warmth to self and /or another, motivates to treat the self and others well while providing a sense of inherent worth.

Anger provides strength to be assertive and defend in a healthy manner.

Fear is to protect the self. Healthy fear will be helpful in preventing people from getting into relationships or situations which would not have the best outcome for the self.

Pain produces growth and matures the self. Life is full of painful experiences, which is useful to grow. A functional person uses pain as a means to work through problems, heal from their effects, gain the wisdom that comes from the painful situations, and continue in the maturing processes **(Mellody, 2003, p. 95).**

Guilt can become a healthy warning mechanism when someone has crossed the line by going against a value, which is important. Feeling this emotion can help change the behavior and get back on track.

Shame provides a sense of humility. It helps in reminding people that they are not superior to the rest and there are always things to learn. Shame stresses on accountability and responsibility to self and others. It helps to accept the imperfections as part of humanity, which is actually healthy.

People suffering from the disease of addiction have difficulty in managing or responding to their emotions appropriately. They tend to react and not respond, generally ending up in not wanting to feel. Based on "fight or flight", addicts prefer the flight route.

Addiction is also known as a disease of emotions. What makes things more complicated is that society tends to label emotions as good and bad. Joy, love, and passion are deemed as positive emotions while anger, fear, pain, guilt, and shame are considered as negative emotions.

The Addict

Thinking differently

Very often we find people with addictions developing errors in their thinking. We sometimes refer to them as cognitive errors, which actually is a form of defense mechanism when the addiction is challenged. Instead of changing their behavior when challenged, these people tend to change their own perceptions instead with the distorted thinking (Evans & Sullivan, 2001).

A study conducted by Stanton Samenow, PhD (Samenow, 2004) with 'sociopaths' found that clients suffering from anti-social personality disorder, had similar thinking errors. When compared with people suffering from addictions, it is observed that there is much in common. Evan & Sullivan (2001) summarized in their work that addicts are not criminals but they develop similar thinking, which resembles antisocial attitudes simply as part of their process of denial when they are actively abusing the substances.

Some of the common thinking patterns were adapted by Evan & Sullivan (2001) and are presented below:

1. **Making excuses.** Looking for reasons to justify behavior
"I only drink when I am tired"; "I only drink when my family irritate me.'

2. **Blaming.** Finding reasons or excuses not to address the main issue. "You always doubt me and never trust anything I say"; "The children keep putting me down all the time".

3. **Redefining.** Diverting the focus to another issue in order not to face the problem. "The doctor never really said I couldn't drink anymore".

4. **Super-optimism.** Behaving in a way that suits the person's own needs or thinking. "I know for sure and I do not want anyone to try to change my mind".

5. **Lying.**
Commission: cooking up stories
Omission : leaving out essential parts of the story

6. **Making fools of others.** Doing things to take the focus of themselves.

7. **Assuming.** Constantly assuming they know what others are feeling, thinking, or even doing. Using these assumptions to justify their addictions.

8. **"I am unique".** Believing that they are special and have unique qualities. "I know what I need to do and nobody can help me".

9. **Ingratiating.** Over pleasing others just to get something in return. Manipulative and uses others by pretending to be helpful and kind.

10. **Fragmented personality.** Generally present with inconsistent behavior. They can be very loving and caring and then suddenly become aggressive and abusive once intoxicated. To the addict this is normal behavior and should be accepted.

11. **Minimizing.** Trying to present themselves or their behavior as though it is not big deal. Downplaying their problems and making it look insignificant. "After all I don't drink the whole day like other alcoholics. I only drink from afternoon after lunch".

12. **Vagueness.** Using techniques or speaking in a way that is unclear. This helps in avoiding being challenged or accused of something. "I suppose so..."; "well maybe...."; "I think so..."

13. **Anger.** Most people suffering from addictions employ anger as a defense mechanism. They tend to use verbal, physical, and psychological aggressions to get what they want or scare others away. It helps in gaining control of the situation as well.

14. **Power plays.** Similar to anger, these people use power to gain control of the situation. Pretending to be very angry and walking out of a challenging situation or not completing tasks and jobs assigned to them as a sign of rebelling.

15. **Playing victim.** The "poor me" role which addicts are very fond of portraying. They believe that they are victims of the society, system, and family; as a result, turn to their addiction. Everyone is always at fault and therefore they need the addiction. This kind of behavior encourages the family member or loved ones to try and rescue the addict. It encourages enabling behavior from people around them, very often, turning people to codependency (which we will talk about later).

16. **Drama / excitement.** They love drama and generally look for it. Core reason is that their actual life is so boring and meaningless that they tend to create situations, which will attract attention of others indirectly away from their addiction.

17. **Closed channel.** Mostly secretive and tend to isolate. Addicts feel the need to protect their using behavior as this is their 'survival". They challenge facts put to them about their addiction and live in secret.

18. **Image.** They feel the need to protect their image and self-respect, though ironical. This group of people will try their best to portray themselves as being fine.

19. **Grandiosity.** They either tend to minimize or maximize a situation or issue that arises as a result of their addiction. This helps avoid and justify the addiction itself.

20. **Intellectualizing.** Using theories and academic abstracts to justify actions and avoid feeling. People with addictions generally have a problem with responding to their emotions and prefer to numb them with their addiction. Feeling is something they shy away from and intellectualizing becomes a good defense mechanism to avoid feeling. Common with professionals and people who are more "educated".

With all these distorted cognitions and error in thinking, it makes it more difficult for the addicted person to understand and realize the situation addiction has caused him or her. They are unable to rationalize or accept that life has become unmanageable for them. Very often this irrational thinking affects the family functioning and members of the family become "ill" as well. Belief systems tend to develop as a result and people take on roles and beliefs as a form of defense to "survive" the disease.

Core Beliefs & Supporting statements

We understand that people respond to situations or emotions based on their own life experiences. This exposure to situations when repeated over time forms a belief system. Very often, the repetition conditions the belief system, to become a core belief.

Core beliefs are main drivers or motivation for people to react or respond in a particular way. Core beliefs can be both negative and positive to the individual. In the case of people suffering from addictions, very often the unhealthy core beliefs are more evident. As a result of the negative core belief, unhealthy response systems are developed as well.

Below are some common examples of core beliefs and supporting statements or responses.

Addict's beliefs

I can't live without it -- Getting high is my most important need.

I am weak -- I must avoid pain at all costs.

I need it -- It helps me -- There's something wrong with me.

My needs are never going to be met if I depend on other people.

I don't have any choice -- I can't say no!

I will never get better – Addiction is a chronic disease.

Security

I can't trust anyone – People are untrustworthy.

I have to be alert for danger at all times -- The world is an unsafe place.

I am afraid -- I should not be afraid.

Bad things I have done are unforgivable -- People don't trust me.

No one will protect me -- Others will always let me down.

Helplessness

I am Helpless – Nobody can help me.

I need to be in control -- My life is out of control.

I am a victim – no one cares about me -- life isn't fair.

I can't change – I am trapped!

I can't cope -- Life is full of stress and overload.

Low self-esteem.

I am disrespected!

I have nothing to offer – others won't like me.

I am inadequate, ineffective, and incompetent.

I don't deserve love or happiness.

Belonging

I am unwanted – Nobody cares anyway.

I am uninteresting – my opinion isn't worth anything.

I don't fit in – I am smaller than the rest.

I am all-alone – No one cares about me.

I am unlovable, and worthless – I don't like myself.

I am unsuccessful, a failure – others are better than I am.

I am stupid – I must never get anything wrong.

I am guilty, it's always my fault – Everybody else is always right.

I must avoid disapproval from any source – I have to appear perfect.

I will be rejected or abandoned -- No one would love me as I am.

I'm unimportant..... if I don't get my way!

I'm weak or a loser..... If I don't defend myself.

Identity

I am a fraud – People will find out I am a fake -- If you really knew me you wouldn't like me.

I am confused – I don't know who I really am.

I am lost – Wherever I am, I don't like it --There is something wrong with me/the world!

People pleasing

I must please people in order for them to like me.

Arguing is wrong -- People should always get along.

I shouldn't bother anyone – I have to keep others happy.

I have to do for others to be loved -- Saying no is selfish!

I'll never live up to my parents' expectations – I have to please them as a result.

Feeling awkward

I am a loser – Everything I do is not right anyway.

I am unattractive – I don't like how I look.

I have nothing to offer – Past events have ruined my chance to be happy.

I am needy – I need things.

Thoughts of entitlement – People should accept me.

Things must be the way I want them to be -- Life should be fair!

I should always get what I want -- The world owes me a living.

I should be able to release all my anger -- People should accept me as I am.

Generalizations and distortions

My needs are never going to be met if I have to depend on other people.

People are evil, greedy, and out to get me.

I won't succeed so why bother trying?

Success means being well off financially.

Perfectionism

I must be perfect – If things don't go perfectly it's a disaster!

I have to have all the answers -- Things are either right or wrong.

I cannot allow myself to make mistakes -- I will appear weak and vulnerable if not.

I'm better than others -- My way is the best!

If I don't try I won't be disappointed – Cannot accept disappointment.

The Family

Negative emotions

We realize today that negative emotions such as shame and guilt can become the driving forces for people (both the individual and the family) suffering from the disease of addictions. This group of people struggle with managing the emotions and tend to respond in unhealthy means. The addicts turn to their drug of choice while family members use the relationship/dependency developed with the addict as a coping mechanism.

Not only do drugs and compulsive behavior numb the emotion almost immediately, but the "affect" provides immediate gratification as well. That helps us understand the disease of addiction from a psychological perspective but what about the family member? What about the loved one who is displaying signs of compulsivity with the emotion as a result of the addiction? Are they addicts as well, now, as a result of their loved one's addiction?

While the addict becomes dependent on the drug of choice, the significant others become codependent on the addict. A codependent relationship blossoms and the dynamics become unhealthy only to condition the addiction even further. We will discuss two important concepts that help define the codependent relationship; learned helplessness and trauma bonding, but before we elaborate on these concepts let's look at response systems, this time, from a learned behavior perspective.

Response systems as learned behavior

Where do the negative responding stem from; are they a result of childhood experiences, family upbringing, the society, or because of living with the addict? Why is it that some people respond to the emotions with unhealthy means while others are able to manage them well and even mature as a result?

I find it fascinating working with the families of people suffering from addictions. You could almost immediately pick out signs and symptoms of the disease inflicting the family. Very often we get into discussions about assertiveness and using "hard love" to get someone into treatment. Of course this concept is something new and the families struggle with it.

"How can I not give him money when he asks for it? He will then go out and steal or borrow from other people? What if he starves on the streets? I cannot take that?" This distorted rationalization leads to conditioning the addiction further. The behavior permits the addiction to manifest further not realizing that even if they don't provide the money, their loved one will still continue with the addiction. The permission actually speeds up the process. My favorite response to situations like this would be "Sounds like your loved one is parenting you well...." I normally get some silence followed by a surprised look before a response is heard.

What about the family?

Dysfunctional parenting scars and wounds individuals emotionally. This encourages unhealthy behavior, messing up thinking processes and relationships; while affecting the individual's spirituality (Mellody, 2003) . This form of distorted parenting can encourage unhealthy emotional responses, such as numbing feelings as people become fearful of their own emotions. The emotions are perceived as being overwhelming and people just do not want to feel them.

John Bradshaw in his book The Family; A new Way of Creating Solid Self Esteem, (Bradshaw, 1996) describes families as a system. He says that wholeness is the first principle of the system. "...the whole is greater than the sum of its parts. This means that the elements added together do not produce the system. The system results from the interaction of the elements. Without the interaction, there is no system."(p. 28)

Bradshaw (1996) describes the second characteristic of the system as the relationship. Families have connecting relationships with each other, when trying to understand the family as a system it is important to appreciate the connections between the individuals.

"Each is partly a whole and wholly a part. Each person within the system has his own unique systemic individuality and at the same time he carries an imprint of the whole family system. I am my family as well as a person composed of whatever unique characteristics I have actualized as a person." (p. 28)

There is a strong bond that keeps the system functioning. The objective of the family system is to continue functioning. Especially when the "addiction virus" intrudes into the system, members take on roles to protect and keep the unit intact. Though the main purpose of the family is the same, it manifests into something unhealthy as now the addiction is even further reinforced by the new unhealthy roles. This unhealthy bond or relationship that keeps the family evolving can be defined as co-dependency.

When one member of the family changes...

In family systems theory, we see the family itself as the patient and view the presenting individual as a sign of family psychopathology or a symptom of the family systems' dysfunction.

Members of the unit depend on each other's roles in order to achieve homeostasis (a balance in order to function). When this functioning unit and the balance is inflicted with the disease of addictions, the unit gets shaken up. The objective of the family is to always function as a unit and as a result, it will find means and ways to continue even with the disease.

Some of the common symptoms that begin to appear with unhealthy families are:

- The need to manage the secret (addiction)
- Staying away from social gatherings
- Avoiding relatives and friends
- Putting on a fake front and pretending that all is well
- Neglecting own needs and focusing on the addicted person
- Blaming self for the addiction
- Feeling of guilt and avoiding addressing the emotions

Unhealthy families don't allow people to live their authentic lives, to act their authentic selves. They dance around their shame, denials, and addictions: working to keep everyone in their assigned unhealthy roles — like it or not.

The family members tend to take on roles in order to find a balance around the dysfunction. The existing roles they hold will evolve and shift in order for the family to now function with the "dysfunction" which is caused by the disease or the addiction.

It is important for the family to seek treatment while their loved one is doing so. It will be unhealthy for a treated person to return to an untreated environment. Ideally treatment needs to take place simultaneously. It is possible that the family gets so used/conditioned to "functioning within the dysfunction" that they are unable to function with a treated person returning with a "new role". Family members are capable of "sabotaging" the recovery once they find it difficult to cope with the changes of their loved ones. Though this is unintentional, but the role changes and resistance can become unmanageable for the whole family.

Some of the common roles found in dysfunctional families are explained below. The roles are not concrete and sometimes some people take on more than one role or keep shifting between roles. The objective is to continue functioning.

The Basic Roles of Unhealthy Families

The Golden Child/Hero

The golden child is the one who "can do no wrong". This child is viewed as being the best and the brightest; even if they're not.

Some golden children play the part well and end up stuck in the role ofsuccess-object, and some golden children are entitled troublemakers who are never expected to actually earn anything, due to their already-favored status. Golden children are expected to abandon their authentic selves in exchange for hollow esteem.

Many golden children wake up much later in life to a nice home, a fancy car, a high-paying job, and a supposedly perfect family; all of which they suddenly realize they'd like to trade for something more authentic. Other golden children are the opposite; their lives are a mess because they've never had to work to earn their status, and the rest of the world doesn't reward them similarly for doing nothing.

The Scapegoat

The scapegoat child can "do no right". This child gets viewed as the reason for everything undesirable and bad, even when they excel. The child is constantly blamed and accused even for the family's misfortunes.

Some scapegoats enter into the trap of trying harder and harder to redeem themselves in the eyes of their family so they can finally gain respect and appreciation for who they really are. They can never achieve such status however, and will burn themselves out trying to get a pat on the back. Other scapegoats succumb to the role of "bad one" and make waves, because they always get labeled bad regardless, so they give up trying and rebel in anger.

Many scapegoats spend much of their adult lives still striving for acceptance and appreciation by constantly doing more, giving more, and trying more. Other scapegoats spark lots of conflict and difficulties. Scapegoats typically wake up later in life and realize things aren't as they should be when their constant efforts to gain respect backfire and they get walked all over at work and at home (or when they get themselves into one too many conflicts pertaining to their adoption of a "who cares" attitude).

The Lost Child

The Lost Child withdraws in self-preservation. Ignored and invisible, this child experiences loneliness and a feeling of not belonging.

Many Lost Children remain in the background into their adult lives, hiding from conflict and healthy risk-taking, stuck in the feeling of a frightened outsider or unimportant "nobody." Lost children typically wake up later in life to find that they have missed out on many emotional things others have had, such as a sense of connectedness and having made a difference in the world.

Often overlooked, many opportunities for better things have likely passed them by as they retreated into a quiet world which focused on something of value to them that was not likely related to confident interaction (and even conflict) with others. Some lost children take an interest in material possessions or other pursuits with limited social/intimate requirements.

Mascot/Clown

The Mascot child jokes and distracts the family from the heaviness of its dysfunction. This child expresses the effects of the family's painful experiences through humor.

Mascots have difficulty accepting and expressing difficult feelings, and will joke their way out of serious circumstances, avoiding the real issue that needs addressing. Mascots may find themselves in entertainment-related fields, since its second nature for them to make light of tragedy, pain, and suffering. Many mascots awaken later in life to find that others have not taken them seriously, or have always felt counted on to make everyone feel better, perhaps at the expense of acknowledging their own painful realities.

The following presents other roles often found in company with the four-basics above. You will find that characteristics of each role often overlap other roles; so less than a position to hold, necessarily, in the family, the roles denote attributes and attitudes played out by family members.

Enabler

If not for the enablers, a family's dysfunction could not exist long. The tragedy is that the enablers can't grasp that fact. Every member in an unhealthy family plays the enabler role to some extent.

This role was first identified in families where a "normal" spouse was married to an alcoholic. Let's say for convenience only that Dad is the alcoholic and Mom is not. She's keeping the family together -- heroic, martyr Mom. She keeps his drinking a secret and enlists the children's cooperation in deceiving the world. Thus he needs not face public approbation for his behavior. She lies to the boss for him when he calls in sick. She bails him out of scrapes and sometimes out of jail itself. She cleans up the messes, both physical and situational, that he's constantly making.

The children, regardless of the other family roles they assume, become enablers also. Assuming in their innocence that everything happening in the family is somehow linked to their behavior, they accept just as much guilt and responsibility as Mom. They learn to keep their mouths shut. They play intensely the roles described above. The addiction is enabled by their adjusting everything to the alcoholic, they all make it easier for him to be one. The kids have no choice. This family is all they have.

Placater

Even a very small child can adopt the placatory role. The placater is going to make it all better somehow. He might distract and heal by being the clown. He is often the hero. The placater knows what words to say to reassure siblings, soothe Mom, or get around Dad. A born negotiator, the placater recognizes in advance the waves that might rock the family boat and tries to still them and may even use an occasional white lie to keep the family friction to a minimum.

Martyr

The martyr will pay any personal price to alleviate the family situation. The martyr sacrifices time, energy, and happiness to keep the family together, to try to get the dependent to quit drinking or shooting up. She will stick it out for a hundred years and go to any extent to make things work out right. By "right" the martyr means "the way the martyr wants them to be." She will burn out or go nuts or both. The only thing the martyr will not be able to do is make a difference in the dependent's habits. In fact, the martyr will be helpful in encouraging the addiction even more.

Rescuer

The rescuer is going to salvage the situation, whatever it is. The rescuer will get a second job to pay the bills. He will bail out the dependent, hire the attorney, pay the estranged teen-aged child's rent, and even do the jobs that would otherwise go undone.

Persecutor

Persecutor says, "It's all your fault!" The persecutor lays blame liberally everywhere but on the self. He tells all the family members exactly what they are doing wrong and why they have not achieved perfection. The persecutor is not a pleasant person to be in the same country with.

Victim

Oh, poor victim -- she didn't ask for any of this. The victim could be happy if only all this weren't happening. She is the soul most to be pitied, because she is so very nice down inside that none of this is deserved. This role is not to be confused with actual victimization. True victims usually do not perceive themselves as victims in this intensely self-pitying sense. Very often presented as "Oh poor me...".

The Limitations of the concept of family roles

These roles and definitions have limitations, though. Some sources claim even more roles. Some claim the golden child/hero only plays the "perfect" role, though some golden children behave quite entitled, lazy, and even antisocial. A similar issue exists with the definition of scapegoats. Some claim the scapegoat as "the bad seed," and others identify the scapegoat as the healthiest member of the family.

Roles and definitions serve the purpose of providing a guideline so as to be clear about the possibility of sabotaging each other's recovery. Sometimes people may absorb more than one role in accordance with the families' needs environment, experiences, and the structure.

Various explanations and definitions can be found to describe the roles. Ultimately the goal is to provide a guideline based on scientific analysis for the families to function within a healthy homeostasis.

Codependency

Codependency is a concept that describes the dysfunctional relationship or behavior of supporting or enabling another individual's addiction, unhealthy behavior, poor mental health, or immaturity. Very often also known as 'relationship addiction', people who are codependent end up in relationships that are not only destructive to themselves but also to the other parties as well.

Codependents tend to react to certain emotions with much exaggeration. Their responses to normal emotions such as guilt or shame can be so overwhelming to themselves that they are constantly anxious and sometimes appear irrational. Emotions like joy can appear to be feelings of elation and they tend to be acted out more than what's actually appropriate. Simple daily struggles appear like the end of the world is near. An argument or debate may seem like a threat or challenge.

As we have seen above, codependency causes roles to shift while the family continues to evolve. The bond is so strong that it enables each other into achieving their own selfish needs and generally people tend to appear 'addicted to each other". The addict continues to numb his emotions with the substance or compulsive behavior while the codependent numbs his emotions with the relationships with the addict.

In these kinds of relationships, people tend to become over-dependent on each other so much for the purpose of getting their own core dependency issues met that their personal and emotional maturity is stunted from growing. As the addict continues the addiction, the codependent sacrifices his or her own needs in order to fulfill the addicts' needs. One person needs to feel needed by sacrificing for the addict's needs while the addiction continues. They tend to continue to please people around them in order to feel important and wanted. There is this strong desire to appear perfect and good for others to approve. They have this delusional idea that as long as they can keep the important people in their life happy, their own pent up explosive emotions will go away.

The concept of codependency was first observed in families of alcoholics. The family members were constantly faced with shame, fear, and anger. They could not do anything about the alcoholic and were constantly fixing all his problems. The main focus of the family would shift to his addiction while the rest of the family members were unable to manage their own emotions. When there was too much of pain and shame, the focus was on keeping the addict happy thinking that would help, which of course conditioned the addiction further. This became a vicious cycle, making the addict happy, neglecting the self in the process, continuing to please the addict; allowing the addiction to "blossom" and fulfilling, the now, codependent's own needs (numbing emotions).

The conditioning continues while the relationship becomes dysfunctional. The codependent needs the addict to function and will even sabotage any recovery in order to "function". Just like addiction, Pia Mellody, refers to codependency as a disease. Mellody claims that codependent people tend to put on an act and try hard to present themselves in any way that will allow them to receive constant approval. They need to feel wanted and important but are actually suffering in pain from intensified feelings of shame, pain, fear, and anger (Mellody, 2003).

The question that should be coming to mind now is that, "So when and how do people actually become codependent?". It sounds like the addiction causes dynamics to shift within a family and therefore roles change as a result, and as we now understand, the shift takes place in order to maintain the family's continuous functioning. Or do codependents already exist even prior to any form of addiction triggering it and the codependency blossoms when there is an addiction involved? This would mean that some people are predisposed to becoming codependents for some reason. If so, how do people become codependents, even if there is no addiction involved in the process?

Theories defining Codependency

Learned Helplessness

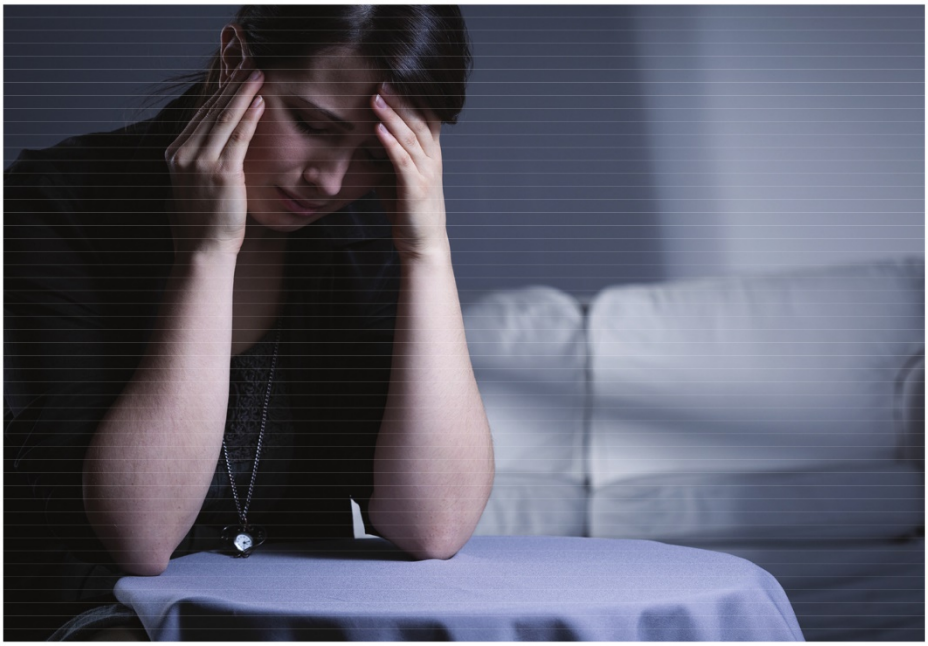
The theory of learned helplessness is explained as, experiencing repeated hurtful and painful stimuli, which could not be avoided and as a result, the pain is learnt and accepted even in situations where it can be avoided. The feeling of being helpless is conditioned even in aversive moments and becomes automatic while giving in to the abuse (Carlson, 2010).

The organism or person then becomes a victim and chooses actions and behaviors which will help in staying in the relationship rather than choosing to battle to get out of it. This person then presents him/herself as almost being confident, normal, and even functioning while allowing the abuser to become more and more powerful: having a greater grip on the victim. The theory of learned helplessness explains that with repeated loss of control or perceived helplessness, depression and even other forms of mental health illnesses may appear (Seligman, 1975).

Now let us relook the above replacing the abuser with the addict; and the victim with the family member or loved one. We realize something very common here with codependent relationships. The addiction takes over the dynamics of the relationship while the addict becomes the abuser. Looking further in depth, we realize there are lots of abuse going on, mostly emotional, psychological, and very often even physical abuse. The loved on gets sucked into this abusive relationship mostly learning to accept the abuse and even taking on roles, as we have seen above, to manage the dynamics of the relationship.

Mental health illnesses are not uncommon within this kind of relationship. When working with families of addicts, we very often encounter depression, anxiety, and other forms of mental health illnesses surfacing; and there is a need to deal with them. The symptoms we see with codependent relationships are evident here.

Trauma bonding



"Fear immobilizes and deepens attachment. It escalates attraction and arousal. It provides addictive intensity and obsession. It keeps behavior secrets and it is very flexible and can be applied in a variety of situations at varying levels". (Carnes, Betrayal Bonds, p. 57)

We all know that if persuasion and seduction does not help in achieving goals then there is always fear and threat as the next option. If people do not succumb to enticement, then fear may just do the job well. How many times have we heard family members saying: "If I don't give him the money...he will harm himself..."; "
He threated to kill himself if he did not get his drugs..."; "He may kill one of us if he gets angry without his high..."

This form of fear works even better when it is employed with seduction (Carnes, 1997). The alcoholic husband can put on a very loving and caring self when he has achieved the high he needs. Sometimes so well presented that the wife who is the victim, now starts to feel that she deserves to be treated with terror. Look at the case of Jane, who actually believed that she deserved to be abused as a result of not serving her husband food on time whenever he requested.

One good example of this concept became evident with the Stockholm case. In 1973, two bank robbers stormed into a bank in Stockholm and held three women and a man hostage for five days. During this period some form of relationship developed between the robbers and the hostages. After being freed by the police, the hostages began to sympathize with the robbers and one of them actually got engaged with the robber after he was released from serving sentence for the robbery.

One explanation for this form of bonding between the abuser and victim is that this is a technique for survival employed by the victims. In order to overcome the seduction and fear, bonding takes place. Fear pushes people to do almost anything in order to defend and protect. With strong defense mechanisms and the desire to survive, human beings are capable to take on roles and even emotions in order to live.

The figure 1 below describes with a diagram codependency and trauma bonding.

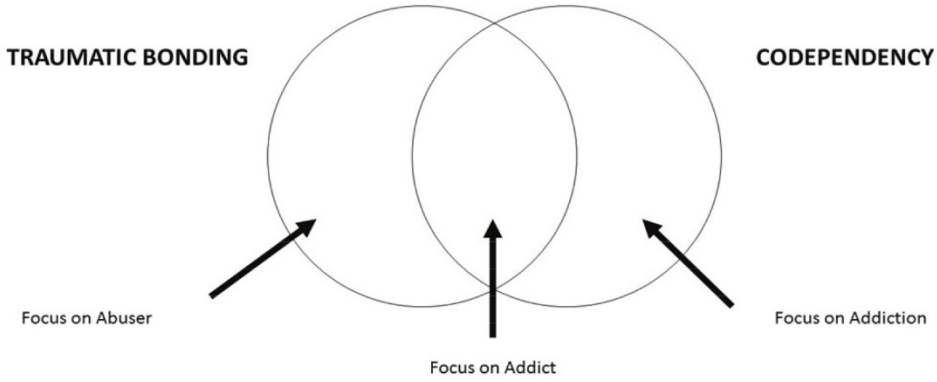


Figure 1 : The main common focus is on the addict, whether it is a result of traumatic bonding or codependency. On the other hand, codependents tend to focus on the relationships with the addiction while traumatic bonding in itself focuses on the abuser. Adapted from *"The Betrayal Bond: Breaking Free of Exploitative Relationships."* By P. Carnes, 1997. Health Communications: Deerfield Beach Florida.

Similar to codependency, where there is a bond between the codependent and the addict, there is an intense connection between the victim and the trauma. Codependents seem to develop very similar compulsive characteristics as people who are affected by trauma bonding, particularly betrayal bonding (Carnes, 1997). As result of the continuous abuse and the intermittent reinforcement of reward along with abuse or punishment, the traumatic bond is developed and conditioned making it more challenging to accept any kind of change.

Family Dynamics: An Imperative tool for Recovery

As can be seen, the addict and his/her addiction did not appear out of thin air, but from the environment and upbringing. In as much as it is influenced by friends, the family dynamic has been at the core and root of the addict's survival mechanism, which was responsible for engineering the addiction. Therefore, an important and necessary tool for wholesome recovery is the work with families. The disorder had its birth in this environment through nurture and cultivation, and will continue to perpetuate unless the family dynamic changes for the better. For this to happen, addicts and their families have to collaborate as a whole unit and work together for greater recovery.

References:

Bradshaw, J. (1996). *The Family; A new Way of Creating Solid Self Esteem.* Health Communications : Deerfield beach, Florida.

Carlson, Neil R. (2010). *Psychology the science of behavior.* Pearson Canada. p. 409. ISBN 978-0-205-69918-6

Carnes, P. (1997). *The Betrayal Bond: Breaking Free of Exploitive Relationships.* Health Communications: Deerfield beach, Florida. ISBN – 13: 978-1-55874-526-1

Evans, K., Sullivan, M., J. (2001). *Dual Diagnosis, Second Edition. Counselling the Mentally Ill Substance Abuser.* The Guillford Press : New York.

Howells, J. (1963). *Family Psychiatry.* Charles C. Thomas : Springfield, III, 4-5.

Mellody, P., Miller, A. W. & Miller, J. K., (2003). *Facing codependence. What Is It, Where It Comes From, How It Sabotages Our Lives.* Harper Collins Publishers: New York.

Samenow, S. (2004). *Inside The Criminal Mind*, Crown Publishers: New York.

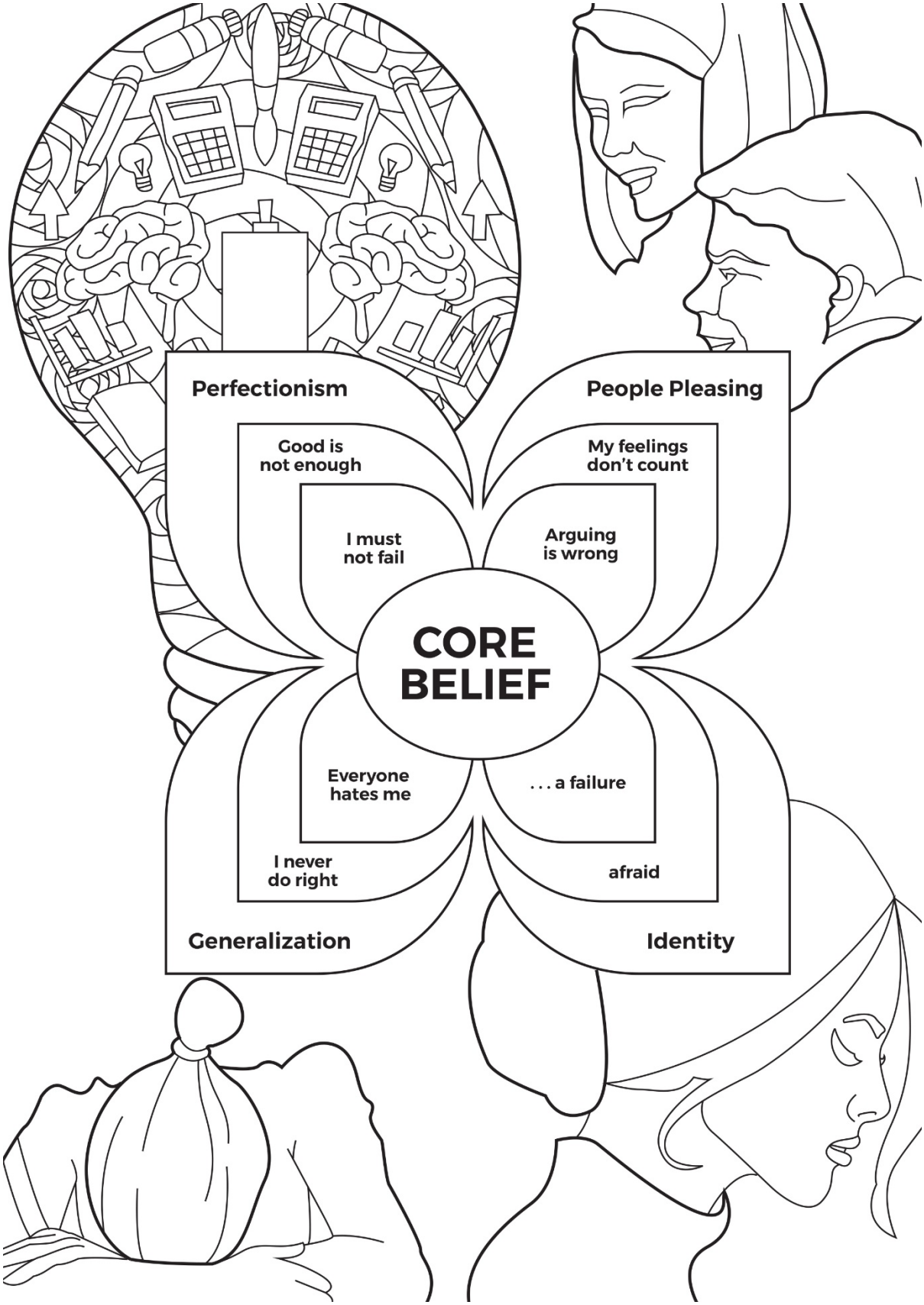
Seligman, M. E. P. (1975). *Helplessness: On Depression, Development, and Death.* San Francisco: W. H. Freeman. ISBN 0-7167-2328-X.

Core Beliefs

Core beliefs are the fundamental convictions we have about ourselves; they are the absolute truths we have developed about ourselves throughout the course of our entire lives, often since childhood.

For example, if we had an emotionally unstable father as children, who constantly punished us and called us "stupid," it is likely that we would then develop the core belief that we are "stupid" or "worthless." Or if we had a neurotic mother who was constantly warning us to "be safe," we might have developed the belief that "we are not safe," creating an endless array of psychological problems in our later lives.

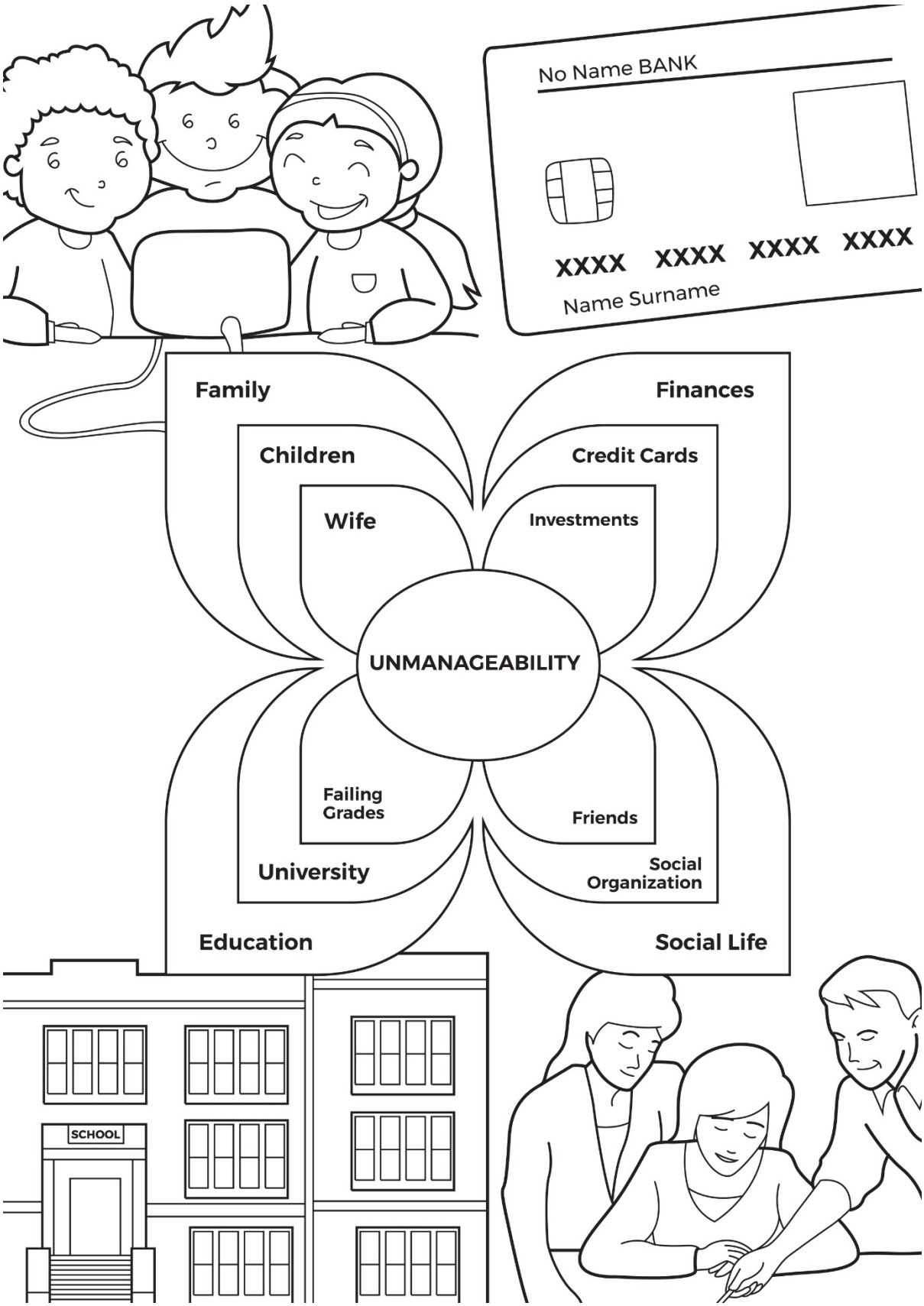
Replacing your core beliefs will take time and effort, but the rewards are endless and priceless. Increased self-esteem, creativity, productivity, prosperity, joy, fulfilment, and love; are some of the many gifts you will receive throughout this journey.


Perfectionism
People Pleasing
Good is not enough
My feelings don't count
I must not fail
Arguing is wrong
CORE BELIEF
Everyone hates me
. . . a failure
I never do right
afraid
Generalization
Identity

Unmanageability

Most of us have tried everything we can think of, exerted every ounce of force possible, to fill the spiritual hole inside us. Nothing—not drugs, not control, and management, not sex, money, property, power, or prestige—has filled it. We are powerless; our lives are unmanageable, at least by ourselves alone. Our denial will not change that fact.

So we surrender; we ask a Higher Power to care for our will and our lives. Sometimes in surrendering, we don't know that a Power greater than ourselves exists which can restore us to wholeness. Sometimes we're not sure that the God of our understanding will care for our unmanageable lives. Our lack of certainty, though, does not affect the essential truth: We are powerless. Our lives are unmanageable. We must surrender. Only by doing so can we open ourselves wide— wide enough for our old ideas and past wreckage to be cleared, wide enough for a Higher Power to enter.


No Name BANK
XXXX XXXX XXXX XXXX
Name Surname
Family
Finances
Children
Credit Cards
Wife
Investments
UNMANAGEABILITY
Failing Grades
Friends
University
Social Organization
Education
Social Life
SCHOOL

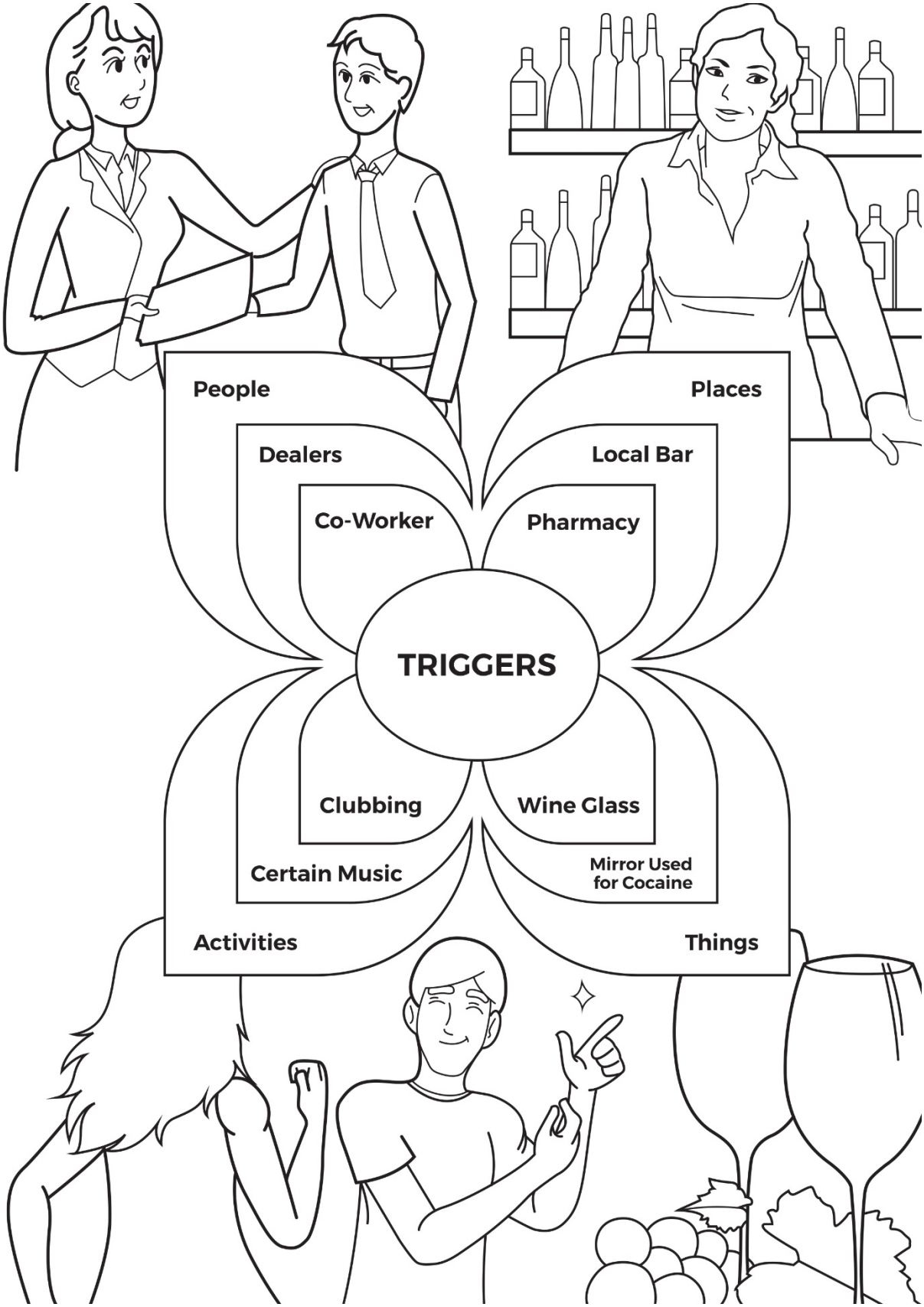
Triggers

Identify your personal triggers.
Everyone is different, so every recovering addict's set of triggers will be different as well. Some common triggers are walking by a bar, seeing someone who is drunk or high, getting paid, the end of a grueling workday or week, getting into an argument with someone, and being bored.

Know what you are working with.
Triggers and cravings are a very real part of recovery. Do not try to fool yourself into thinking that they will not happen to you. Instead, know your triggers, stay open to anything that may surprise you, and have a plan for when you feel yourself being triggered.

Practice your trigger plan.
Role play, even just with yourself in the mirror, what you will do when you feel like using again. You may save yourself from a rough day, a temporary lapse, or a full relapse back to substance abuse.

Take care of yourself.
You can handle triggers more easily when you are eating and sleeping well, exercising, and remaining aware of your emotions. You are probably familiar with H.A.L.T.: Hungry, Angry, Lonely, Tired. These four things are said to cause more lapses and relapses.

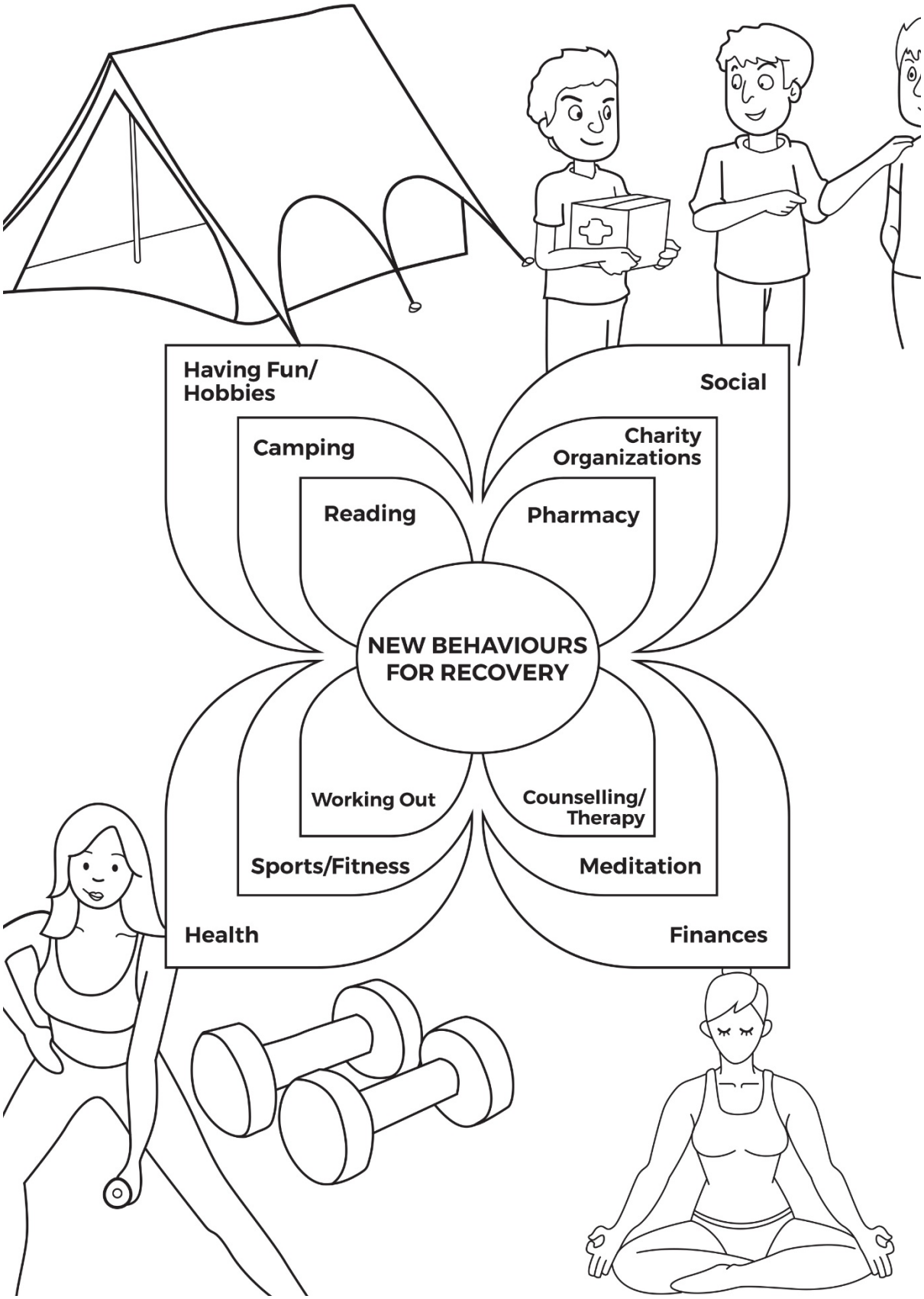

People
Places
Dealers
Local Bar
Co-Worker
Pharmacy
TRIGGERS
Clubbing
Wine Glass
Certain Music
Mirror Used for Cocaine
Activities
Things

New Behaviors for Recovery

Using addicts are a confused and confusing bunch of people. It's hard to tell from one minute to the next what they're going to do or who they're going to be. Usually, the addict is just as surprised as anyone else.

When we used, our behavior was dictated by the needs of our addiction. Many of us still identify our personalities closely with the behavior we practiced while using, leading us to feel shame and despair. Today, we don't have to be the people we once were, shaped by our addiction; recovery has allowed us to change.

We can use an inventory to see past the needs of the old using life and find out who we want to be today. Writing about our behavior and noticing how we feel about that behavior helps us understand who we want to be.
Our inventory helps us see beyond the demands of active addiction, beyond our desire to be loved and accepted—we find out who we are at the root. We begin to understand what's appropriate for us, and what we want our lives to be like.
This is the beginning of becoming who we really are.


Having Fun/
Hobbies
Social
Camping
Charity
Organizations
Reading
Pharmacy
NEW BEHAVIOURS
FOR RECOVERY
Working Out
Counselling/
Therapy
Sports/Fitness
Meditation
Health
Finances

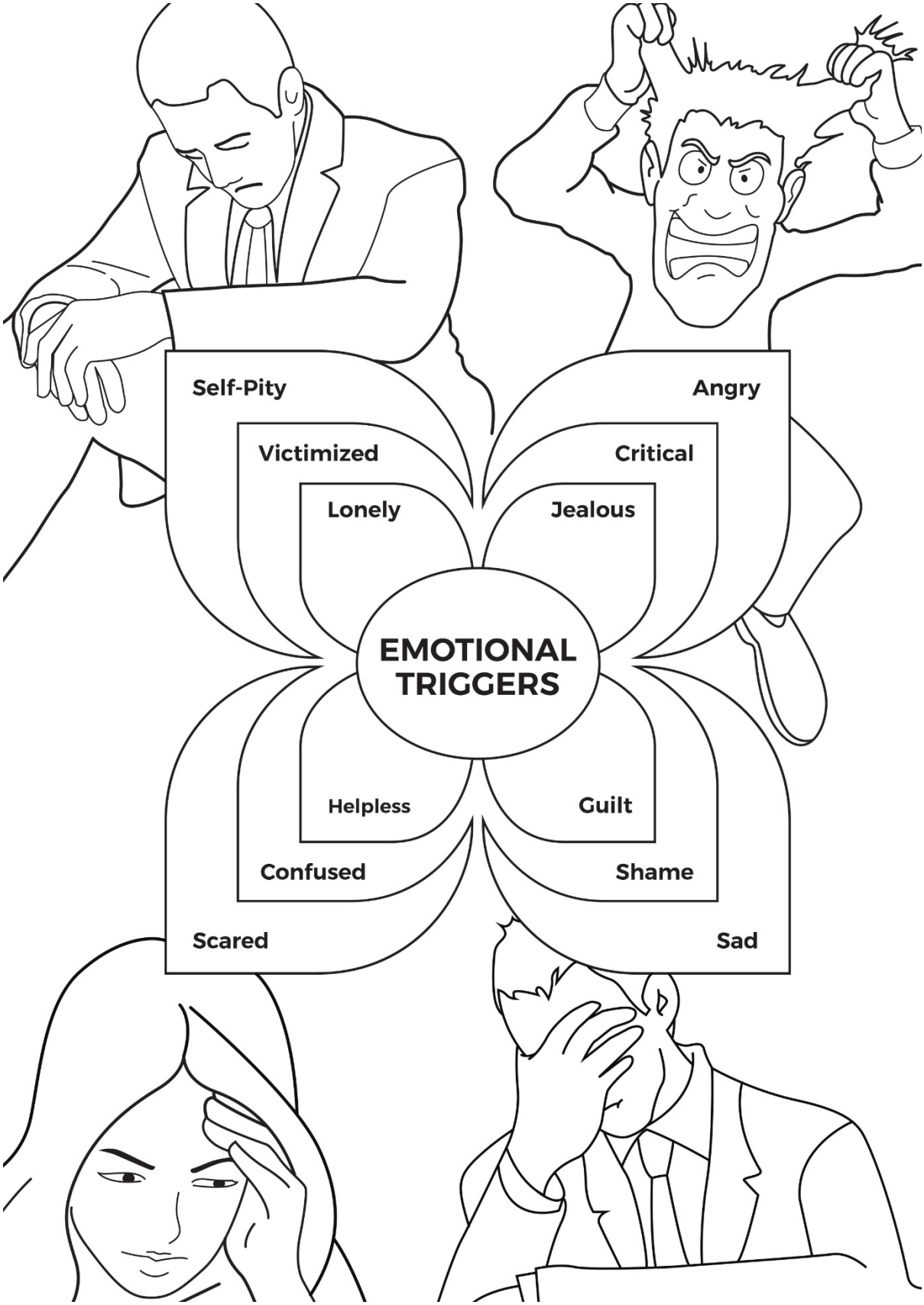
Emotional Triggers

We all have emotional triggers. You know the feeling when someone makes a jokingly-mean comment that might not be a huge deal to another person, but totally destabilizes you for the rest of the day? You feel this way any time someone expresses any disapproval of you. Suddenly, you find yourself feeling off center and thrust into a bout of anxiety, depression, guilt, or shame.

Sound familiar?

It can be challenging to identify what exactly our triggers are, but this process of getting to know and understand them can help us heal, and learn how to cope better in response.

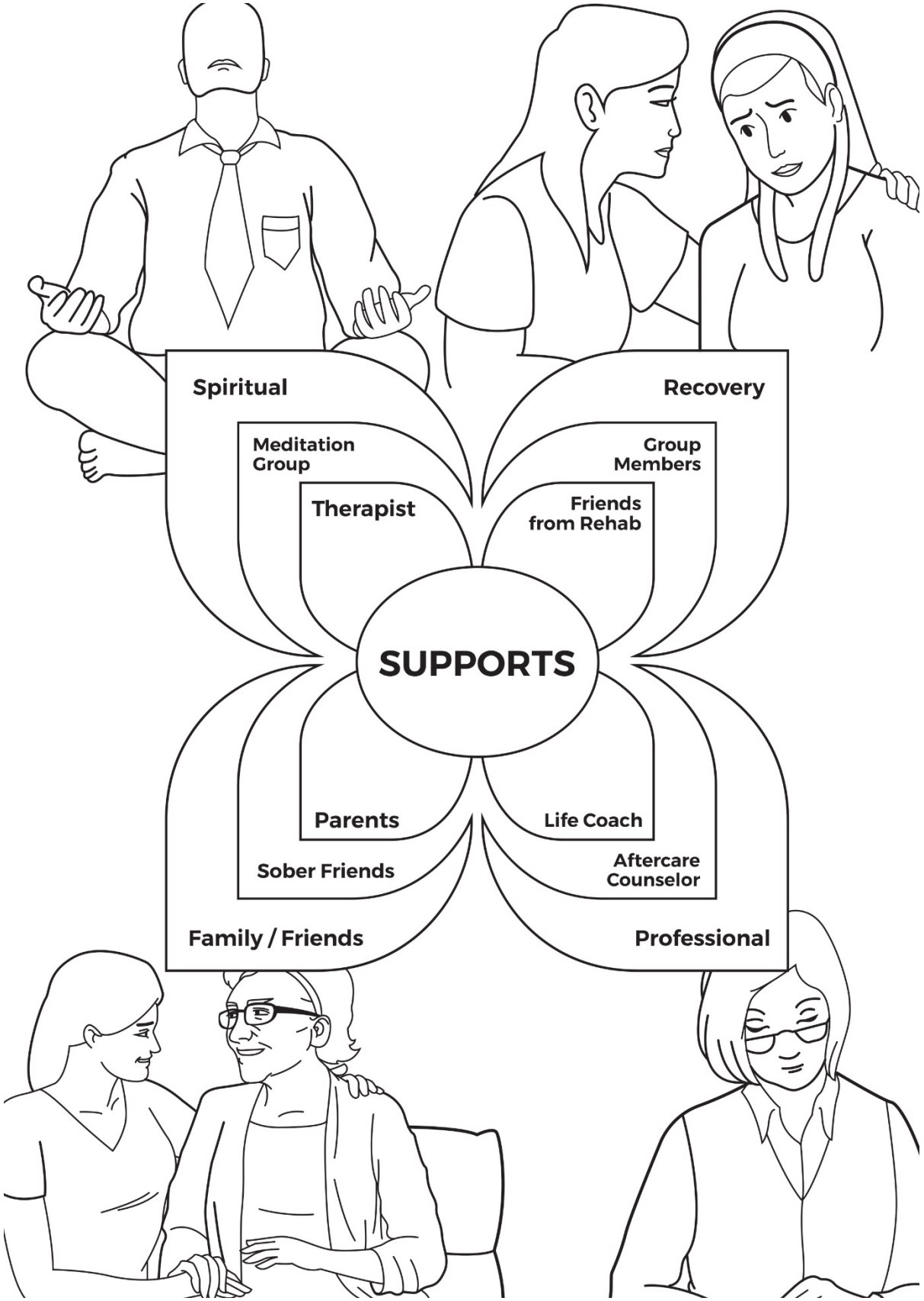
But why do we all have triggers? In short, because we were all children once. When we were growing up, we inevitably experienced pain or suffering that we could not acknowledge and/or deal with sufficiently at the time. So as adults, we typically become triggered by experiences that are reminiscent of these old painful feelings. As a result, we typically turn to a habitual or addictive way of trying to manage the painful feelings.


Self-Pity
Angry
Victimized
Critical
Lonely
Jealous
EMOTIONAL TRIGGERS
Helpless
Guilt
Confused
Shame
Scared
Sad

Support

Social support has many benefits. It shines the light on things that may have contributed to the addiction developing in the first place: shame, secrecy, and isolation. It is healthy to gradually share your shame, secrets, and insecurities with select members of your social group. In fact, making these disclosures is often crucial to establishing a successful recovery.

However, in some situations, it may be safer and wiser to share these things with a professional psychotherapist. Unlike well-meaning friends and family members, the law requires professional therapists to maintain your confidentiality. A friend today may become an adversary tomorrow. A professional therapist is like a vault: sealed shut. If you should decide to consult with a therapist, ask at the onset if there are any legal exceptions to confidentiality.


Spiritual
Recovery
Meditation Group
Group Members
Therapist
Friends from Rehab
SUPPORTS
Parents
Life Coach
Sober Friends
Aftercare Counselor
Family / Friends
Professional

Denial

Avoidance: "I'll talk about anything but my real problems!"

Absolute Denial: "No not me, I don't have problems!"

Minimizing: "My problems aren't that bad!"

Rationalizing: "If I can find good enough reasons for my problems, i won't have to deal with them!"

Blaming: "If I can prove that my problems are not my fault, I won't have to deal with them!"

Comparing: "Showing that others are worse than me proves that I don't have serious problems!"

Compliance: "I'll pretend to do what you want if you'll leave me alone!"

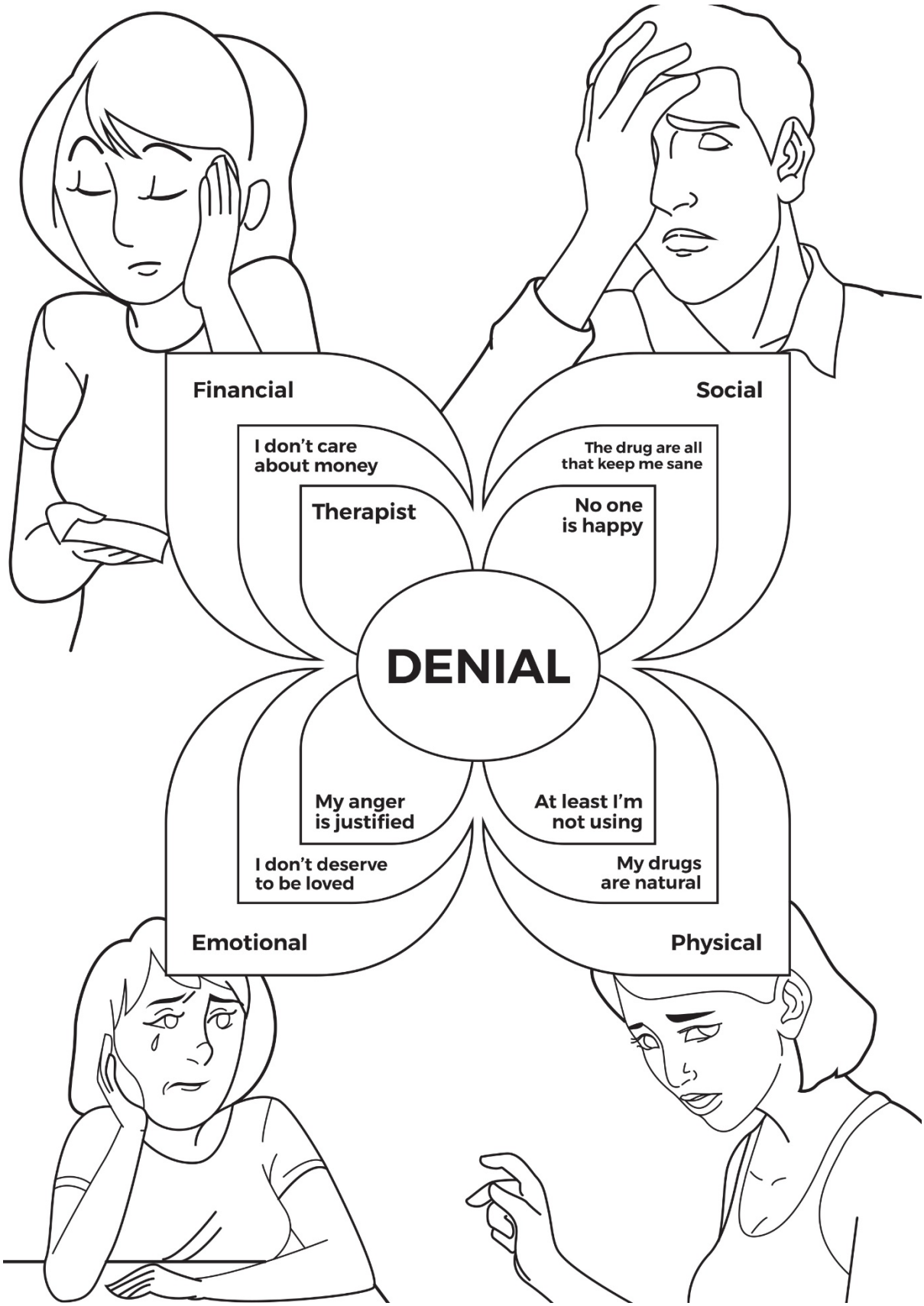
Manipulating: "I'll only admit that I have problems if you agree to solve them for me!"

Flight Into Health: "Feeling better means that I'm cured!"

Recovery By Fear: "Being scared of my problems will make them go away!"

Strategic Hopelessness: "Since nothing works, I don't have to try!"

Democratic Disease State: "I have the right to destroy myself & no one has the right to stop me!"

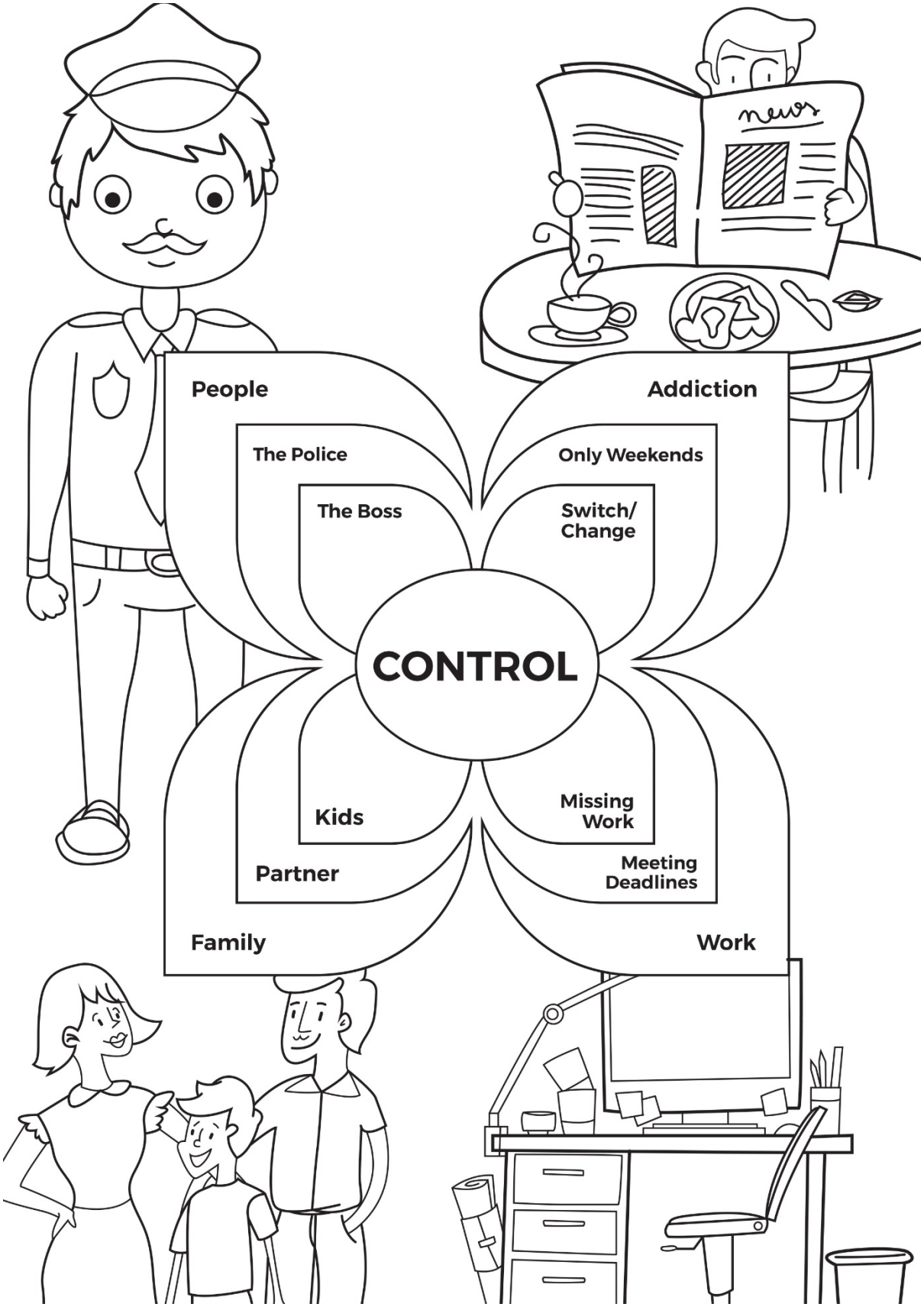

Financial
Social
I don't care about money
The drug are all that keep me sane
Therapist
No one is happy
DENIAL
My anger is justified
At least I'm not using
I don't deserve to be loved
My drugs are natural
Emotional
Physical

Control

Most people who have led addicted lives also seem to have an addiction to control everything and everyone around them. We do this because of a deep fear of life due to things that have happened to us while we were young. If you have ever been abandoned, abused, neglected, or experienced any kind of traumatic event that made you feel like your life was out of control with no protection, then you may possibly become a control addict as an adult.

When you face a threat as a child even if it is just a parent's divorce, it can make you feel unsafe and unprotected so you make a vow in your little heart that goes something like this "When I am older, I will never let anyone else be in control of my life; I will stay in control".

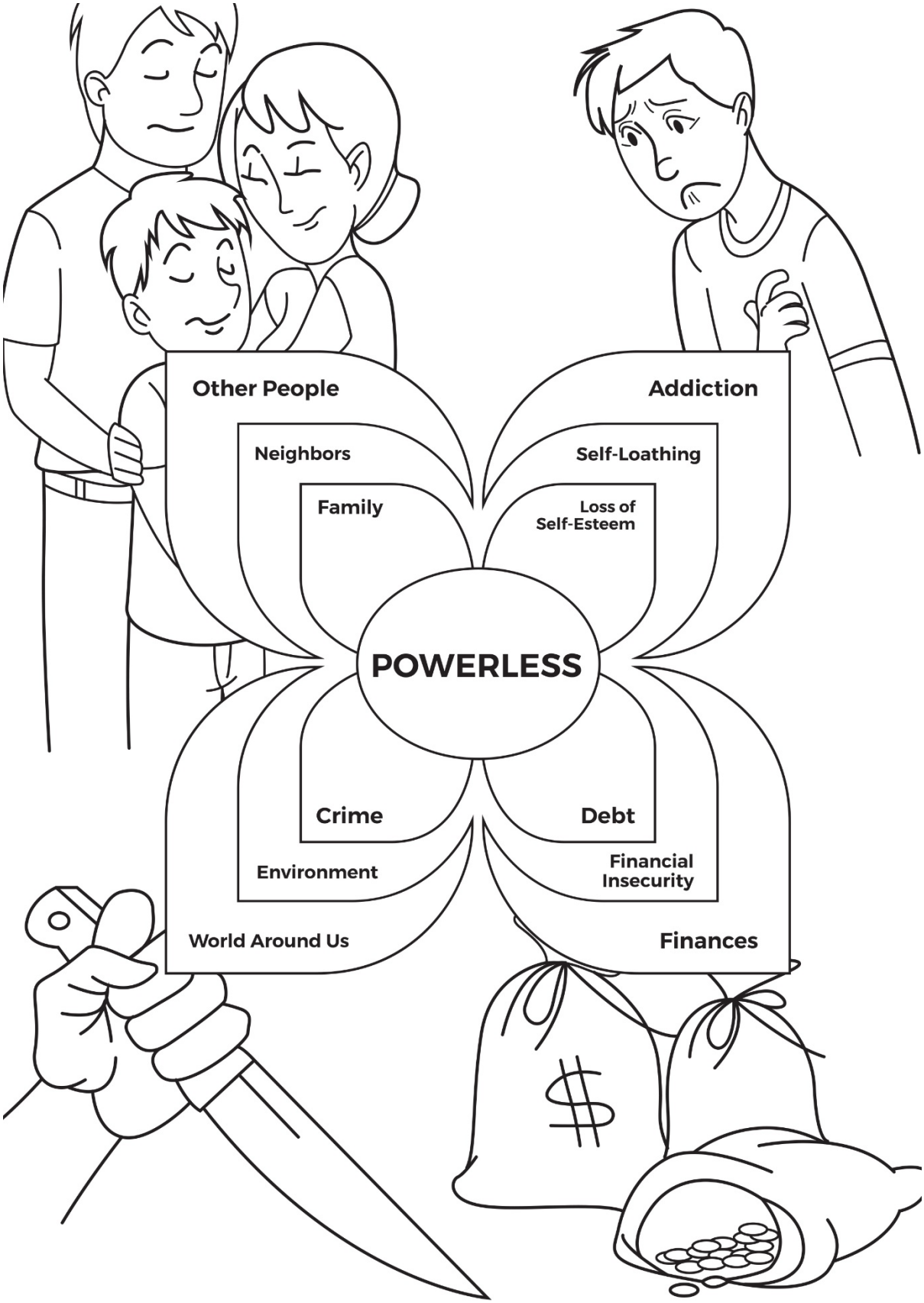
Because of this, as adults we become control freaks and create really stressful environments for those that have to live with us. We control to protect ourselves because we fear being harmed again.


People
Addiction
The Police
Only Weekends
The Boss
Switch/
Change
CONTROL
Kids
Missing
Work
Partner
Meeting
Deadlines
Family
Work

Powerless

It is not difficult to overestimate the amount of control we have over our lives, particularly when addiction is involved. When most people begin abusing drugs or alcohol, they truly believe they can limit their use. They are convinced they are recreational users who take drugs and alcohol because that is what they want, not what they need. This is why hitting rock bottom plays such a large role in addiction. As addiction begins to overtake your life, you lie to yourself about what is happening.

Unfortunately, many cannot shatter that illusion until they hit rock bottom and are confronted with undeniable proof that everything is not okay. Only then do they feel that powerlessness that comes from addiction. Once you fully admit you are powerless over your addiction, you can begin the process of rebuilding your life. As you survey the havoc your addiction has wreaked, you can take comfort in knowing that the rubble will gradually be cleared away and a new landscape will emerge. That takes time, patience, and the support of others.


Other People
Neighbors
Family
Addiction
Self-Loathing
Loss of Self-Esteem
POWERLESS
Crime
Environment
World Around Us
Debt
Financial Insecurity
Finances

Negative Automatic Thoughts

Automatic Negative Thoughts are the most basic form of thoughts. We are not trained to identify them. In the course of therapy, one of the most important aspects of it is to identify these automatic thoughts.

They have several characteristics which are:

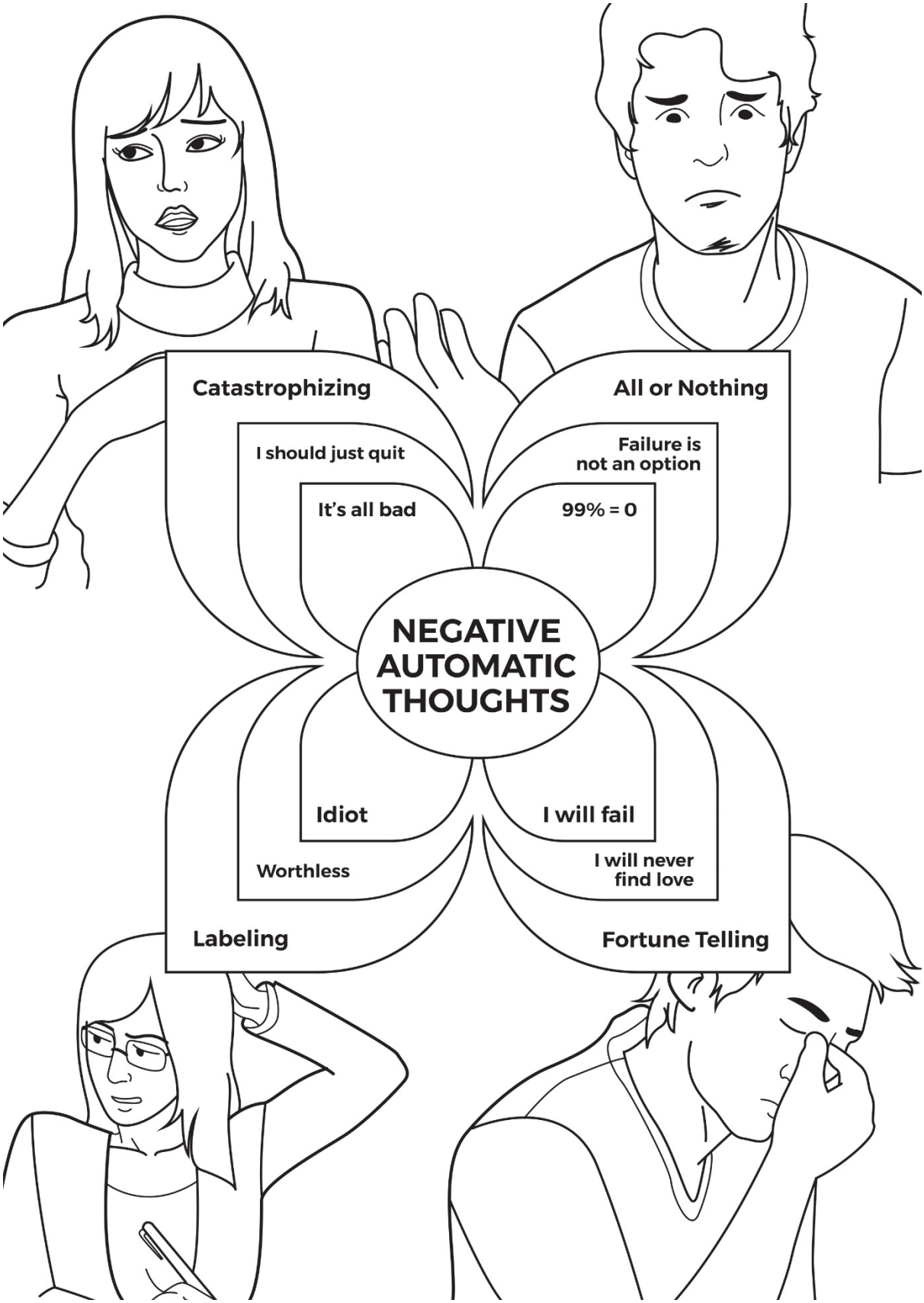
Automatic – they just pop into your head without any effort on your part.

Distorted – they do not fit in with all the facts.

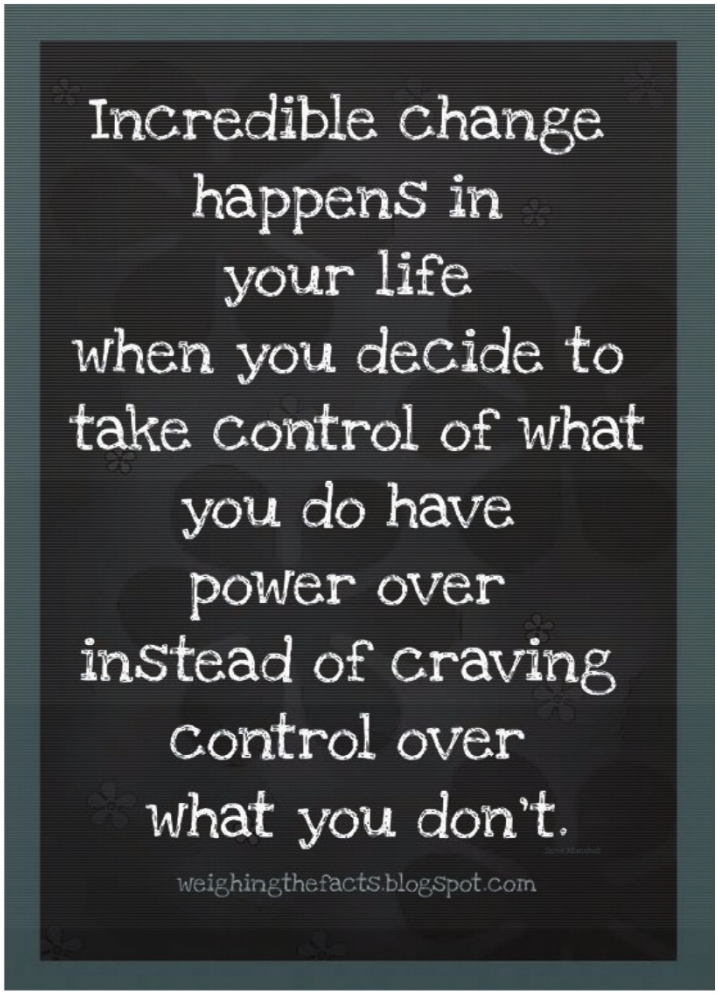
Unhelpful – they keep you feeling the extreme emotions that you experience, making it difficult to change; and stop you getting what you want out of life.

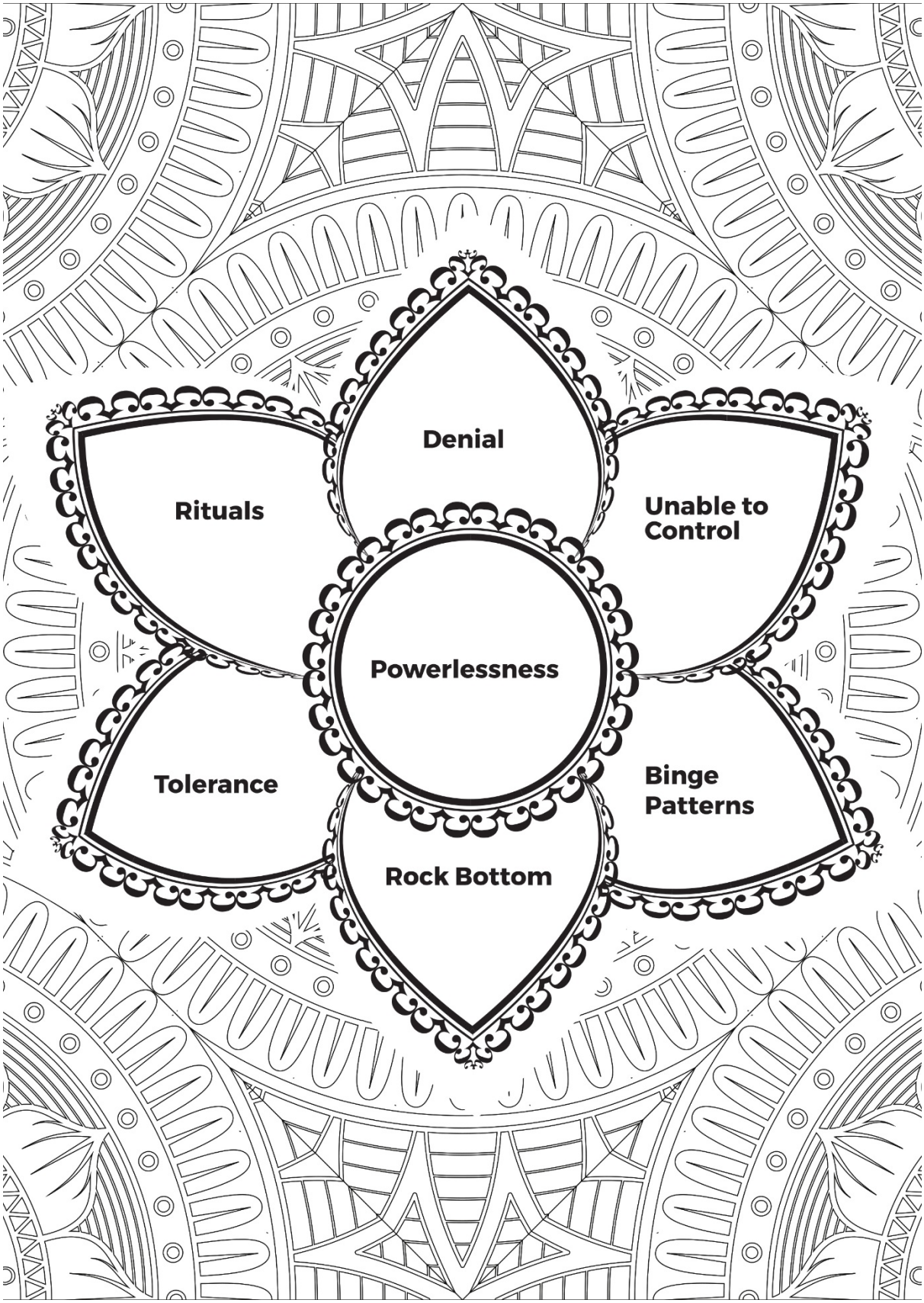
Plausible – you accept them as facts and it does not occur to you to question them involuntarily – you do not choose to have them and they can be very difficult to switch off.

These thoughts can trap you in a vicious circle and maintain the way you feel. For example, the more depressed you become, the more automatic negative thoughts you have and the more you believe them and this in turn makes you feel more depressed.


Catastrophizing
All or Nothing
I should just quit
Failure is not an option
It's all bad
99% = 0
NEGATIVE AUTOMATIC THOUGHTS
Idiot
I will fail
Worthless
I will never find love
Labeling
Fortune Telling

Powerlessness

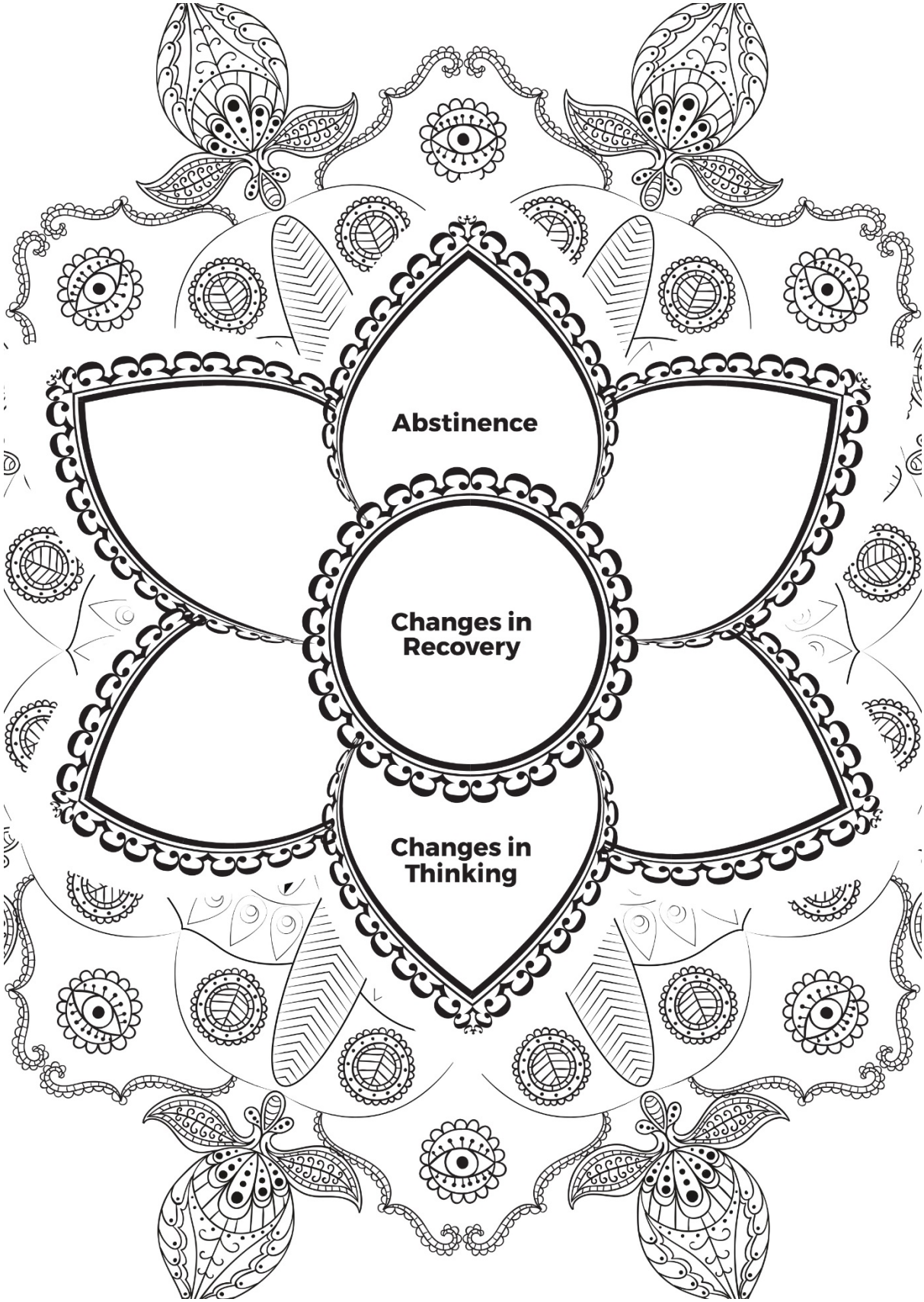



Denial
Rituals
Unable to Control
Powerlessness
Tolerance
Binge Patterns
Rock Bottom

Changes in Recovery

Recovery from dependency means change, not only for the addict, but for the family members too. We have to change our attitudes and our behavior. Why? Because recovery often creates new patterns of work and leisure and inevitably brings about changes in relationships with friends and family. In short, recovery from dependency ranks right up there at the top of the chart of major life transitions. And major life transitions always create new and unusual pressures in a person's life.

One of the most important tasks of recovery, for the addict and for family members, is learning a new bag of healthy and constructive coping tricks. We must learn to meet the challenge of change, rather than collapsing under its onslaught. But remember, old habits die hard, even when they're no longer useful.

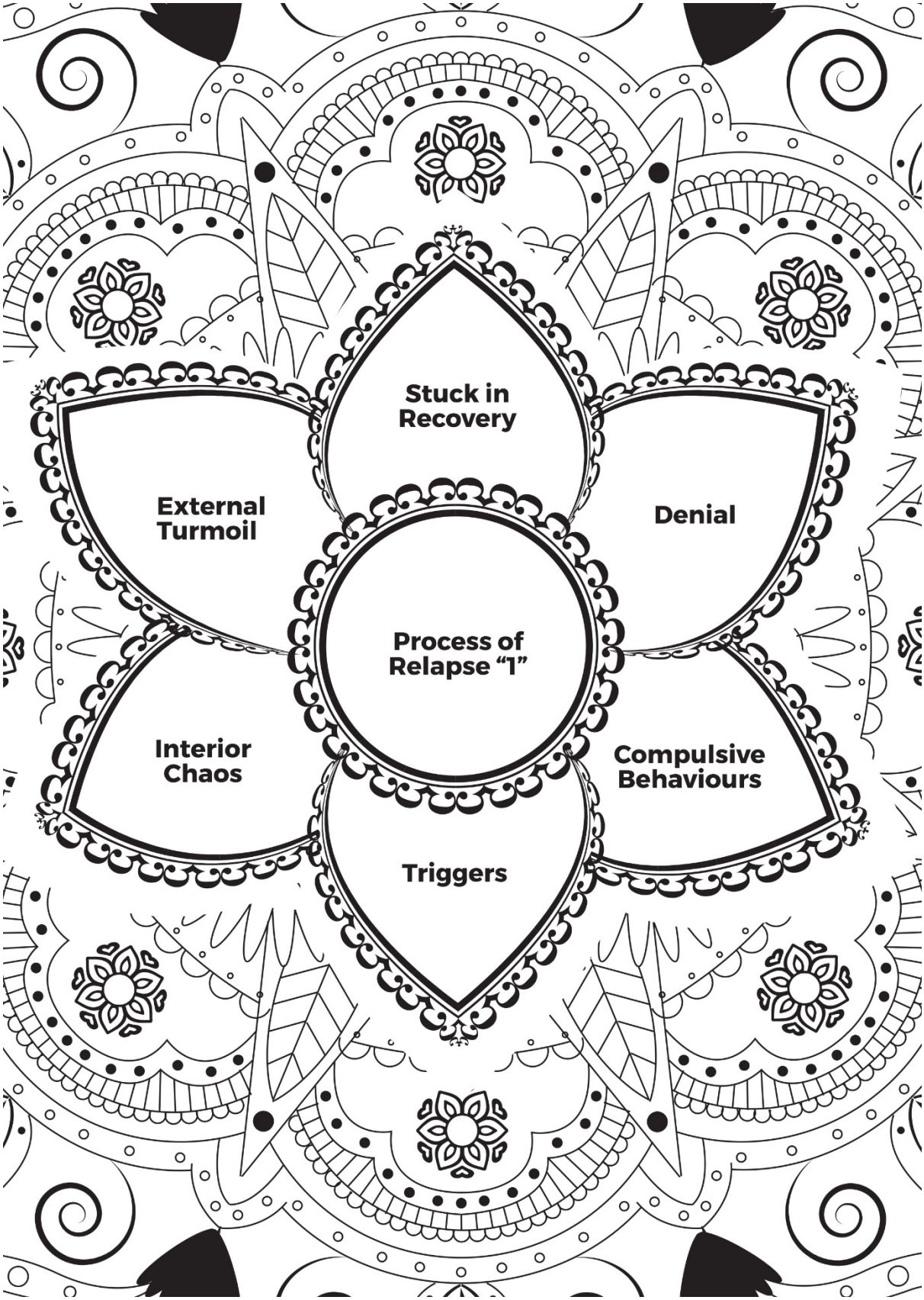

Abstinence
Changes in Recovery
Changes in Thinking

Relapse

Relapse prevention at this stage means recognizing that you're in emotional relapse and changing your behavior. Recognize that you're isolating and remind yourself to ask for help. Recognize that you're anxious and practice relaxation techniques. Recognize that your sleep and eating habits are slipping and practice self-care.

If you don't change your behavior at this stage and you live too long in the stage of emotional relapse, you'll become exhausted, and when you're exhausted you will want to escape, which will move you into mental relapse.

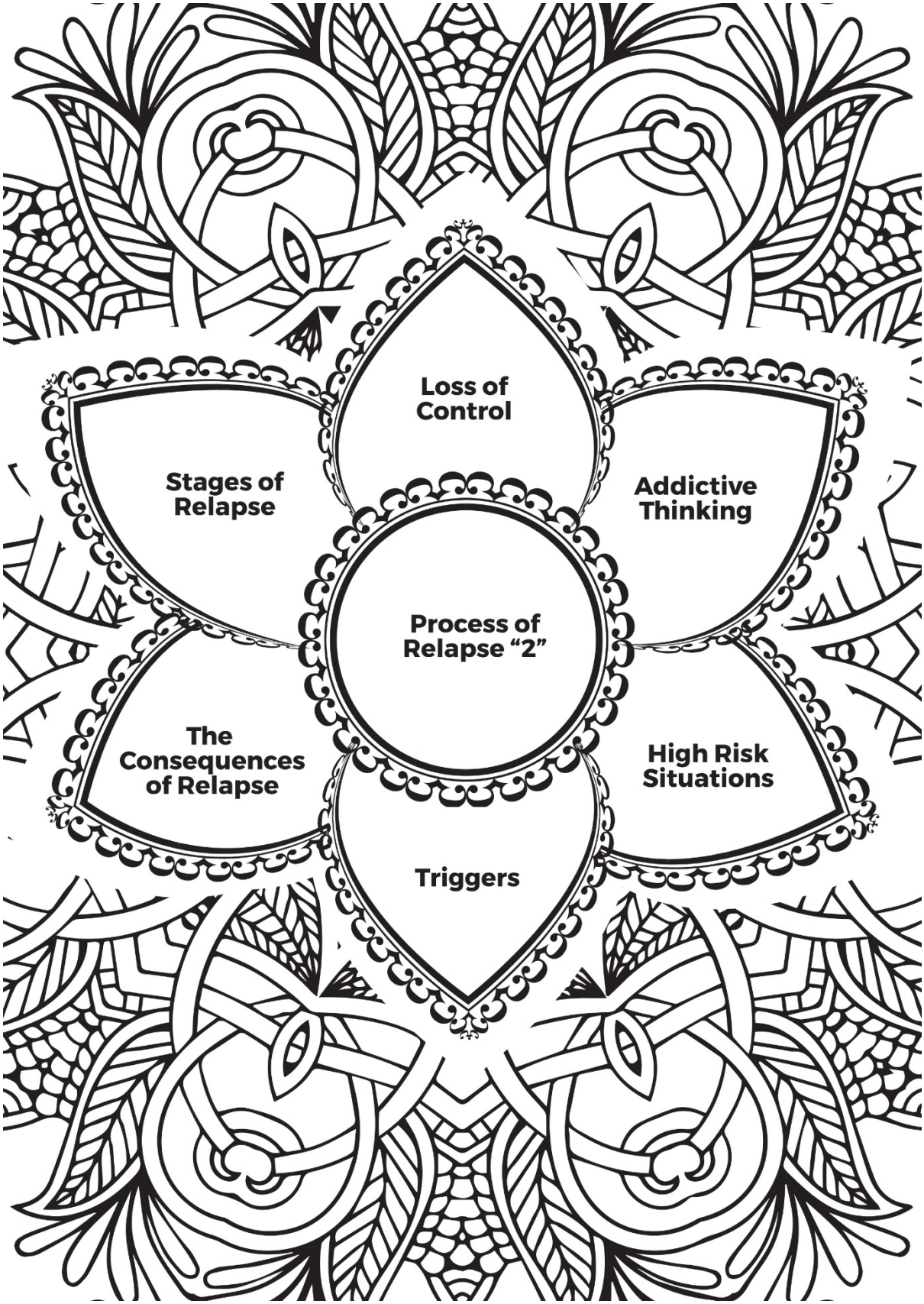
Practice self-care. The most important thing you can do to prevent relapse at this stage is take better care of yourself. Think about why you use. You use drugs or alcohol to escape, relax, or reward yourself. Therefore you relapse when you don't take care of yourself and create situations that are mentally and emotionally draining that make you want to escape.


Stuck in Recovery
External Turmoil
Denial
Process of Relapse "1"
Interior Chaos
Compulsive Behaviours
Triggers

Relapse

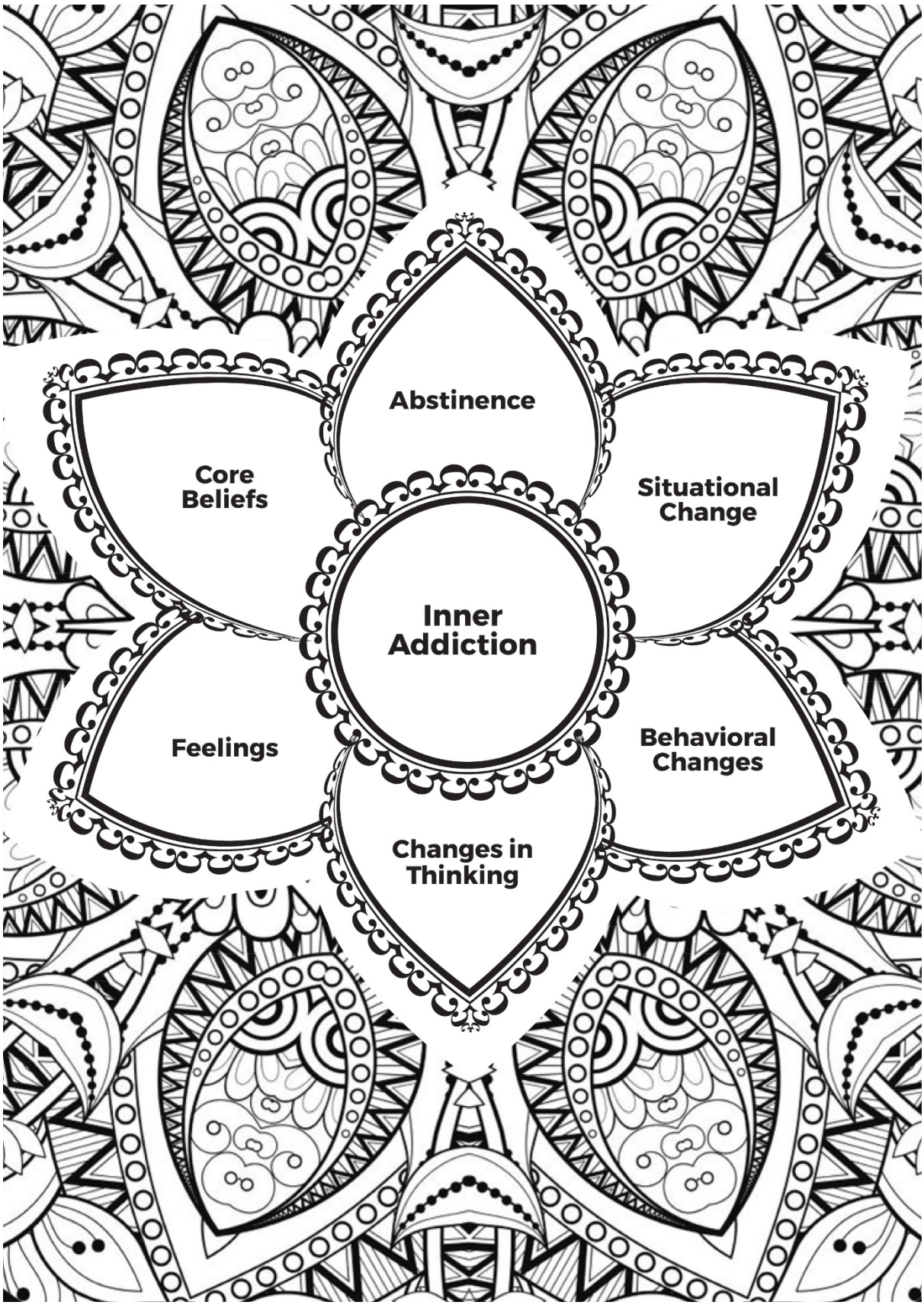
A common mental urge is that you can get away with using, because no one will know if you relapse. Perhaps your spouse is away for the weekend, or you're away on a trip. That's when your addiction will try to convince you that you don't have a big problem, and that you're really doing your recovery to please your spouse or your work. Play the tape through. Remind yourself of the negative consequences you've already suffered, and the potential consequences that lie around the corner if you relapse again. If you could control your use, you would have done it by now.

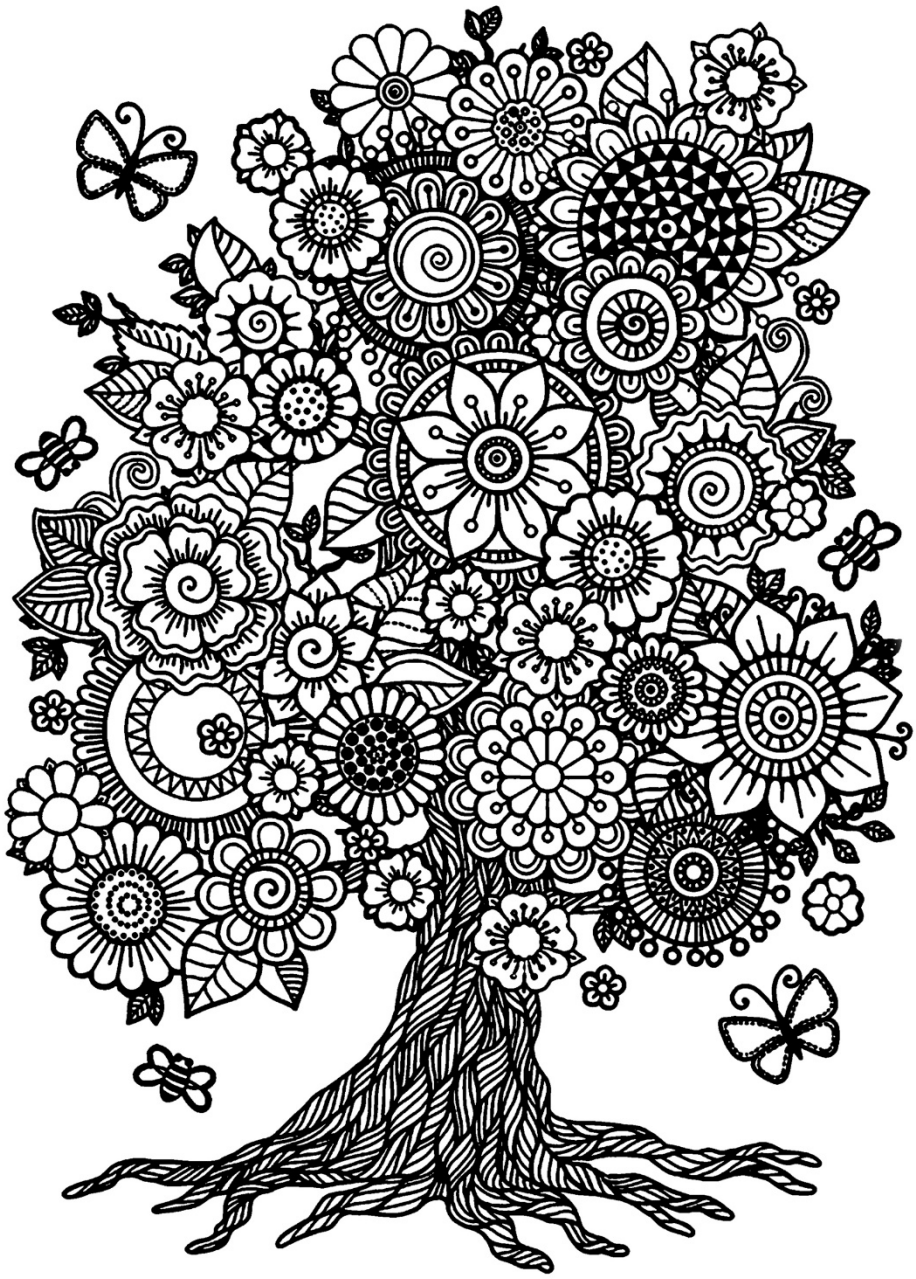
Tell someone that you're having urges to use.
Call a friend, or someone in recovery. Share with them what you're going through. The magic of sharing is that the minute you start to talk about what you're thinking and feeling, your urges begin to disappear. They don't seem quite as big and you don't feel as alone.


Loss of Control
Addictive Thinking
High Risk Situations
Triggers
The Consequences of Relapse
Stages of Relapse
Process of Relapse "2"

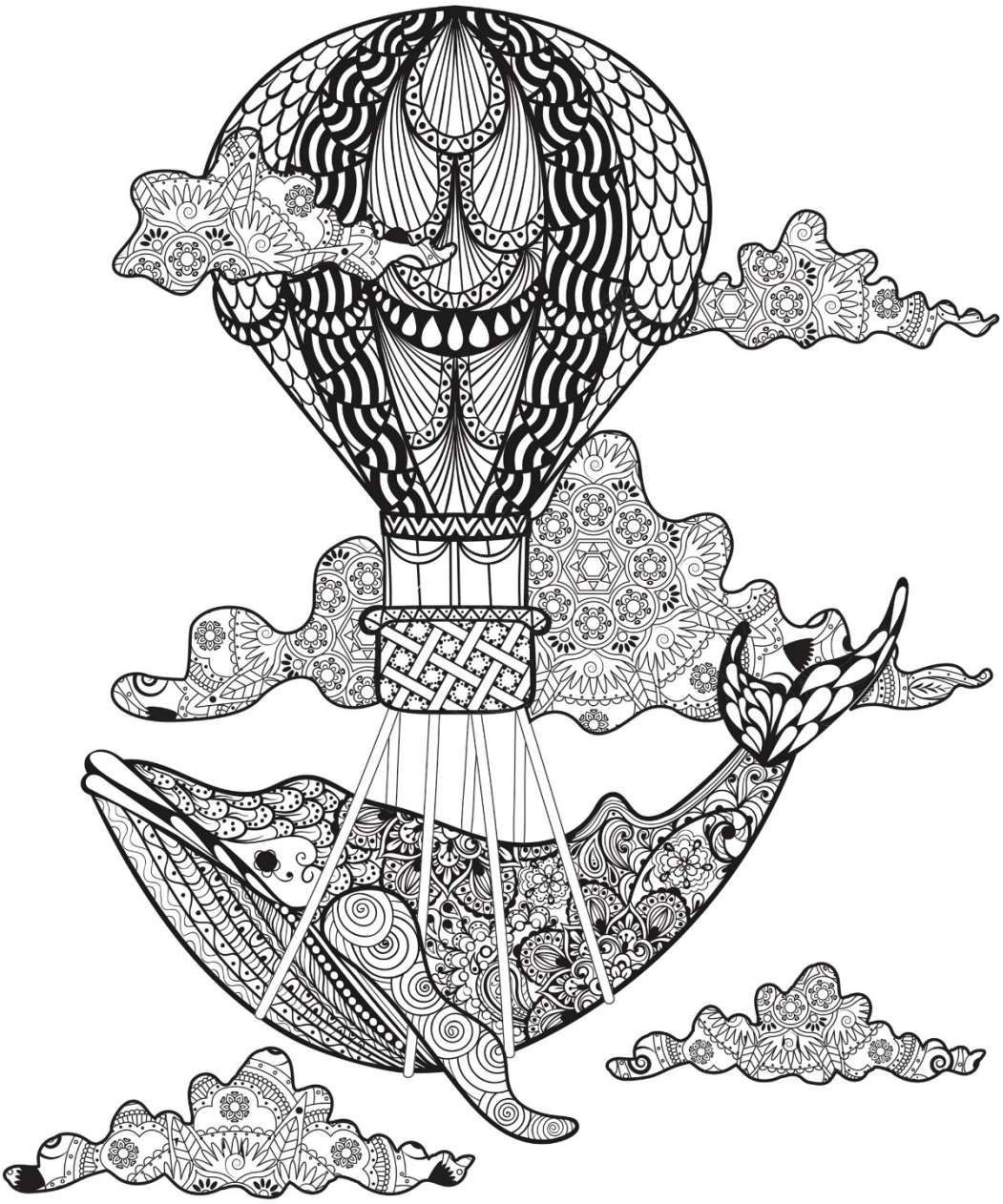
Inner Addiction

When on the roller coaster of emotional turmoil,
I remember that growth is often painful. My evolution in recovery has taught me that I must experience the inner change, however painful, that eventually guides me from selfishness to selflessness. If I am to have serenity, I must STEP my way past emotional turmoil and its subsequent hangover, and be grateful for continuing spiritual progress.


Abstinence
Core Beliefs
Situational Change
Inner Addiction
Feelings
Behavioral Changes
Changes in Thinking



Be Strong, You Never Know
Who You Are Inspiring



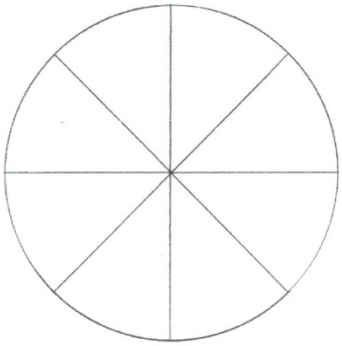
How to Make Your Own Mandala

"EACH PERSON'S LIFE IS LIKE A MANDALA — a vast, limitless circle. We stand in the center of our own circle, and everything we see, hear and think forms the mandala of our life. We enter a room, and the room is our mandala: the clouds, the trees, the snow on the peaks, even the rattlesnake coiled in the corner...Everything that shows up in your mandala is a vehicle for your awakening."

—PEMA CHÖDRÖN

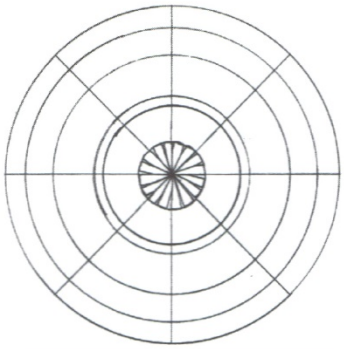
Mandalas are much easier to draw than you think!

STEP 1



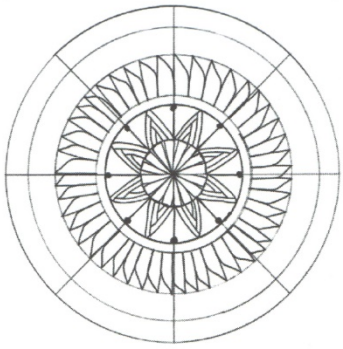
Draw your center point and your outer circle (in pencil, so you can erase later).

STEP 2



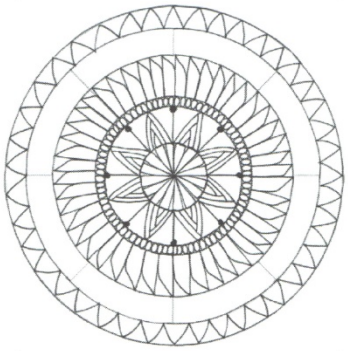
Draw additional circles in random sizes. Start filling things in! I tend to start in the middle, but you can start anywhere.

STEP 3



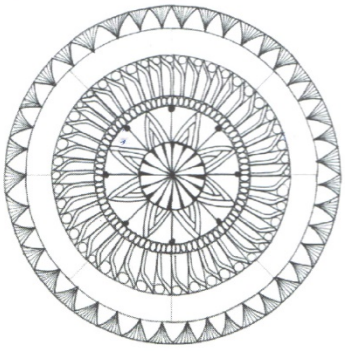
USe your grid lines to help you space your patterns. Don't worry about getting everything perfect, just follow your pattern.

STEP 4



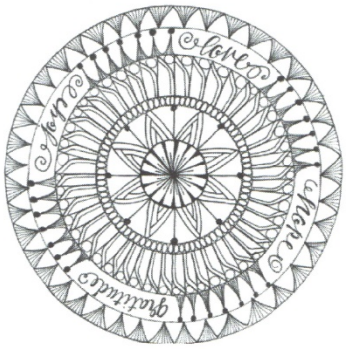
You can see that my patterns are not perfectly spaced/ shaped. It won't matter in the end, I promise. Mandalas are, in part, an exercise in trust.

STEP 5



As you go back and add details, imperfections become less obvious.

STEP 6



Fill in some of your blank spaces with words that are personally meaningful.

Publication seven

Shanmugam, P. K. (2020). Psychoeducation impact for family members of substance misusers: use of the Kirkpatrick model to evaluate the workbook 'Addiction: A Family Disease'. *Journal of Substance Use,* DOI:10.1080/14659891.2020.1807632

Published online on 27 August 2020. It was not possible to gather citations, views or downloads yet.

Journal of Substance Use

ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/ijsu20

Psychoeducation impact for family members of substance users: An evaluation the workbook "Addiction: A Family Disease"

Prem Kumar Shanmugam

To cite this article: Prem Kumar Shanmugam (2020): Psychoeducation impact for family members of substance users: An evaluation the workbook "Addiction: A Family Disease", Journal of Substance Use, DOI: 10.1080/14659891.2020.1807632

To link to this article: https://doi.org/10.1080/14659891.2020.1807632

Published online: 27 Aug 2020.

JOURNAL OF SUBSTANCE USE
https://doi.org/10.1080/14659891.2020.1807632

Taylor & Francis
Taylor & Francis Group

Psychoeducation impact for family members of substance users: An evaluation the workbook "Addiction: A Family Disease"

Prem Kumar Shanmugam

Psychology, Manchester Metropolitan University, Kepayan, Kota Kinabalu, Malaysia

ABSTRACT

Background: In countries such as Malaysia, extended families are common and therefore more people are affected when a loved one is substance dependent. Interventions for family members are as equally important as treating the substance-dependent person in order to ensure holistic treatment is achieved. This study focuses on evaluating a workbook developed for family members of loved ones seeking treatment in a private residential treatment facility in Malaysia.

Methods: This evaluation study employs a mixed methodology approach guided by the Kirkpatrick model. Semi-structured interviews were conducted with family members using the workbook, triangulating findings with results from pre-and post-intervention questionnaires.

Results: Findings from the evaluations were observed at three levels of the Kirkpatrick model: reaction to program – participants revealed high satisfaction levels; learning achieved – an increase in knowledge; behavior – knowledge acquired on a disease model of addiction impacting on their belief system.

Conclusions: Findings from this study suggest that creating awareness among affected family members on the impact of substance dependency on the family dynamics can empower a substance user's significant others and engender hope and realistic beliefs, and that employing a culturally appropriate workbook effectively supports the psychoeducation element of a family intervention program.

ARTICLE HISTORY
Received 29 March 2020
Revised 22 July 2020
Accepted 4 August 2020

KEYWORDS
Substance dependency; family; evaluation study; workbooks; psychoeducation

Background

Malaysia is one of the many developing countries experiencing a rise in rates of problem substance use. The National Anti-Drug Agency (NADA) in Malaysia reported a steady increase in addiction cases since 2013 (National Anti-Drugs Agency, 2017). With high relapse rates between 25% and 35% from 2013 to 2017 (National Anti-Drugs Agency, 2017) and the range of substances used, identifying means to treat addictions has become an ongoing challenge for clinicians. Though Malaysia is considered as having an excellent public sector health-care system, it is still in an infancy stage in treating addictions (Mazlan et al., 2016).

Rane et al. (2017) reported an increase in alcohol consumption per capita globally, with expectations that it will rise even higher in low- and middle-income countries (LMICs). The World Bank classifies Malaysia as an upper middle-income country (The World Bank, 2018), but Malaysia's economic success may be exposing the country to Western disease problems without the health and social care infrastructure to meet the needs, leaving Malaysia exposed to addiction-related issues.

With the growing trend in addiction-related problems, there is likely to be a rise in the numbers of affected family members (AFMs). There were an estimated 100 million family members globally affected by a loved one's addiction (Orford et al., 2013). Rane et al. (2017) and Copello et al. (2010) suggest that the actual number of family members may vary from two to ten people (Velleman & Templeton, 2003), but this is now likely to have risen, especially in countries with traditionally more extensive families.

Rane et al. (2017) suggest that there is little support offered to family members, while AFMs can be reinforcing the problem itself or its amelioration (Ghani et al., 2008). Family members may give in to the needs of the addicted person resulting in failed attempts to help their loved ones. There is evidence supporting psychosocial interventions for AFMs to improve coping skills, benefitting the society at large by reducing health costs and possibly helping their loved ones with the addiction itself (Mellody et al., 2003; Rane et al., 2017). Though there is no one specific treatment approach identified for AFMs, a toolbox of interventions should be made readily available (Copello et al., 2010). Some evidence-based approaches include; brief interventions for AFMs, support groups, online material, joint treatment both for the AFM and users, and community resources (Copello et al., 2010). The importance of providing education on addictions, appropriate coping responses and skills, relapse management techniques, and ensuring social support are also emphasized (Copello et al., 2005).

However, Rane et al. (2017) claim that intervention methods employed with AFMs are designed and evaluated for AFMs in higher-income countries (HICs). They also found limited evidence on overall outcomes from interventions targeting AFMs, suggesting that AFMs are underrecognized and that interventions need to be culturally adapted to meet specific needs of the AFMs, especially in LMIC contexts. Shanmugam (2019), on the other hand, stresses that substance misuse programs in Malaysia should incorporate innovative approaches addressing the cultural factors in the family

CONTACT Prem Kumar Shanmugam premkumarshanmugam@yahoo.com Psychology, Manchester Metropolitan University, Kepayan, Kota Kinabalu, Malaysia

system and not just mirror Western-based approaches. Unlike the nuclear family structure often found in HICs, family structures in developing countries extend beyond immediate family to include grandparents and even cousins, therefore treatment approaches should reach out to all those involved in the closely knit structure. In Malaysia, however, there is a lack of family-based approaches incorporated in substance misuse treatment programs which is also the reason for lack of research in family-based programs (Baharudin et al., 2013).

Introduction to this study

This study focuses on evaluating a workbook titled "Addiction a Family Disease: A book for expression by colours on the concepts of the Family Disease" and its impact on improving family members' understanding of addiction and its outcomes on the family. The workbook is employed as part of a biopsychosociospiritual treatment approach for family members who admit loved ones into international residential treatment in Malaysia. The workbook is part of the family treatment program, providing help in an understanding of the addiction, and creating an awareness of the roles family members play in reinforcing the addiction itself while identifying means to review unhealthy family dynamics.

Contents for the book are derived from working experience with the families and theories and evidence of family dynamics and behavioral addiction. Family members are encouraged to attend therapy sessions with the clinicians once their loved ones are admitted into treatment. *Objectives of the workbook content include delivering* understanding of the (i) addiction itself, primarily on the core beliefs and emotions; (ii) the family's belief systems, focusing on negative emotions, response system, and change; (iii) roles identified in unhealthy family systems and finally (iv) the concept of codependency (Carnes, 1997). In the workbook, codependency is further explained and supported by theories such as: trauma bonding (Carlson, 2010) and learned helplessness (Beckwith, 2014). The workbook ends with 30 pages of coloring-in mandalas employing the themes core beliefs, triggers, emotional triggers, and denial, as well as introducing new behaviors in recovery. Readers are encouraged to color the mandalas to help them review and recall the contents for better understanding. Beckwith (2014) explained coloring in mandalas reduces anxiety levels by focusing on healthy emotions while improving concentration. The mandalas also help with processing the emotions as clients keep going back to the coloring to reflect what it means to them (Beckwith, 2014).

This evaluation *of the workbook* targets three specific objectives:

(1) To gain evidence of the readers' reactions to the topics in the workbook
(2) To evaluate what knowledge is acquired as a result of the workbook
(3) To evaluate family members' ability to apply the knowledge in real-life situations.

Materials and Methods

This project is a mixed methodology evaluation study employing *semi-structured* qualitative assessments along with quantitative pre- and post-intervention questionnaires. The evaluation is guided by the Kirkpatrick Model (Kirkpatrick, 1996) measuring Levels 1, 2, and 3 *of knowledge: 1 Reaction to knowledge, 2 Acquisition, 3 Application*. Objectives 1, 2 and 3 refer to the three levels in the Kirkpatrick Model.

Materials

Objective 1 (reactions) is identified with evaluation forms with the aid of Likert scale (Figure 2), intended to measure general reactions to and perceptions of relevance of the book's content, and the method of delivery.

Objective 2 (acquisition) is measured by pre- and post-reading achievement tests comprising 17 questions (Figure 3) administered to measure variance in participants' understanding of the concepts and theories in the book. The repeated measures *t* – test was employed to compare achievement tests.

Objective 3 (application) is evaluated with semi-structured interviews (Figure 4). The interview guide explores the participant's experience with their loved one's addiction-related issues, views about addiction, motivation to seek treatment, relationship issues, anticipated effectiveness of treatment outcomes, and satisfaction with treatment outcomes. Interview questions were constructed with the aid of a mapping grid adapted from Cox (2019) (Figure 1) to map objectives across multiple tools, including qualitative and quantitative approaches based on objectives 1 and 2. *This exercise identified* missed themes *that informed the interview guide. Content analysis was applied to emergent themes from the qualitative interviews within the overarching themes from the Kirkpatrick model.*

Interviews were conducted by the primary researcher in the homes of the family members and office in the rehabilitation center. Participants were oriented to the purpose of the study while consent forms were completed prior to the interviews.

Pilot study

A pilot study was conducted to establish the reliability and validity of the evaluation tools and feedback form. All respondents reported that the feedback form to measure objective 1 was easy to understand. Statistical analysis computed on the feedback form revealed good internal consistency estimates of reliability for the three subscales with Cronbach's alpha 0.851 (topics), 0.828 (content) and 0.968 (logistics).

Objectives explored	Understanding of Addiction	Skills	Belief system	Self-perception/Self-esteem	Resilience		Positive & supportive relationships	Wellbeing						
	Interview outcomes explored (Themes)													
Objective 1 (Reaction to knowledge)														
TQ1 Relevancy of topics	X		X	X			X							
TQ2 Relevancy of contents	X	X	X	X				X						
TQ3 Relevancy of Logistics (illustrations)	X		X											
Objective 2 (Acquisition)														
TQ4 Codependency	X	X	X	X	X		X	X						
TQ5 Disease model	X	X												
TQ6 Belief system	X		X	X	X			X						
Objective 3 (Application)														
TQ7 Topics in the book and relationship to real life		X	X	X	X		X	X						
TQ8 Application of knowledge acquired		X		X	X		X	X						
TQ9 Influencing or helping others		X	X	X	X		X	X						

Figure 1. Evaluation: mapping against outcomes.

Participants

Convenience sampling methods were used to identify participants for both the pilot and main study. Forty-one (N = 41) respondents for objective 1, and 42 (N = 42) respondents for objective 2 participated in the main study while a group of six participants (N = 6) comprising mainly of family members who have loved ones in treatment responded to Objective 3. Inclusion criteria for participation in this project were: a minimum of 16 years old; family members with loved ones in residential treatment for at least 28 days; loved ones in treatment with a diagnosis of substance use disorder (drugs or alcohol) based on DSM-V (American Psychiatric Association, 2013). For the purpose of this study, a family member is defined as a relative or a partner who has lived with a person with problematic substance use for a minimum of 2 years during active addiction.

The G*Power statistical analysis program computed significance of the participant sample size. The computation revealed that a *t* test with sample of 42 participants (N = 42) would have an outcome of power (1-β error prob) = 0.8 with α error prob = 0.05 and effect size dz = 0.5. *In order to ensure biasness was minimized when interpreting the data gathered, respondent validation was applied by asking participants if the findings were synonymous with their views.*

Results

There were16 female (37.2%) and 26 male (60.5%) respondents for objectives one and two, with 15 (34.9%) in recovery themselves from substance dependency and 14 (32.6%) having previously been in treatment. The mean age of the six AFM respondents for objective three was 35.5, ranging from 17 to 71 years old.

A majority of the respondents were married (59.5%), one cohabiting (2.4%). Almost half were Malaysian Chinese (40.5%), 21.4% Malays and 14.3% Indians, and four international respondents; two Caucasians 4.8%, one Arab (2.4%), and one Philippine (2.4%). About eighty-eight percent were university graduates and one (2.4%) diploma holder. Participants were mostly middle-income, being above the average socio-economic status of the Malaysian population.

Objective 1: to evidence readers' reactions and perceptions

Findings from the descriptive studies explicitly demonstrated high satisfaction levels with the family workbook, particularly on contents:

> It's a good book. Helped in how to cope with situations like this (71-year-old female, son in residential treatment).

Participants expressed the ability to identify with the themes (see Figure 1).

(i) Relevance of topics
(Understanding of addictions, belief system, positive and supportive relationships)

> It was good. … behavioural insights, what to look out for, how to identify problems because it took us a long time to even realize there

Name : Date :
Relation to addicted person : Duration of addiction :

No	Questions	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
1.	It was enjoyable to read the book.					
2.	The contents have improved my knowledge on addiction.					
3.	The illustrations in the book were appropriate.					
4.	The topics were relevant to my questions.					
5.	The content of each chapter is relevant.					
6.	The mandalas in the book were relevant to the topics.					
7.	The topics in the book were engaging.					
8.	I have acquired relevant skills from reading the book.					
9.	The designs for the mandalas were engaging.					
10.	The topics helped increase confidence.					
11.	The content in each chapter were easy to understand.					
12.	The mandalas were not too elaborate or complicated.					
13.	The topics made reading interesting.					
14.	I will be able to r ecall the knowledge easily in times of need.					
15.	There was sufficient illustration throughout the book for ease of understanding.					
16.	The overall content of the book was relevant to my needs.					
17.	The author's sharing of personal experiences was helpful.					

Figure 2. Program evaluation and feedback form.

was a problem. Most family members don't even know they have a problem (47-year-old Malaysian female, brother in treatment)

(ii) Relevance of contents and (iii) logistics *(Understanding of addictions, skills, belief system, self-perception/self-esteem, wellbeing)*

Now I feel my husband has an addiction. In the past I did not understand it due to my experience with my parents … There was no education about addiction …… now I feel I have hope. I was not aware of hope in the past … with the education now I have hope … … the book gave me more understanding about my core belief, my negative thoughts, unmanageability, and expectations from him as a father, or husband or family member … (Singaporean female, husband in treatment)

Objective 2: to evaluate knowledge acquired

Findings from the t-tests (Table 1) revealed a significant difference between pre- and post-achievement test results ($t = -3.535$, $p < .001$). All the participants expressed an increase in knowledge of addictions as a result of the workbook.

(i) *Codependency (Understanding of addiction, skills, belief system, self-esteem, positive and supportive relationships and wellbeing)*

… I learned how to cope. How to manage with situations better now … I have changed a lot … I feel sorry for the boys and girls who are addicted … I feel sorry for the family … and I want to help them … I know what is happing to them … (71-year-old female married, son received residential treatment).

Disease model (Understanding of addiction and skills)

All participants in the interview agreed that they understood better the disease model explaining addiction. They mentioned how they are now able to better manage not only their own reactions and response but also the other family members reactions as a result of the workbook.

… I have completely changed after I understand addiction is a disease … now I know it has nothing to do with will power at all … Changing of the core beliefs of addiction has helped me (Singaporean female, husband in treatment).

(ii) *Belief system (Understanding of addiction, belief system, self-perception/Self-esteem, Resilience, Wellbeing)*

Participants agreed their belief system had shifted as a result of the increased knowledge upon reading the workbook.

	Topics	Content	Logistics
	1. ___		
		2.___	
			3.___
	4.___		
		5.___	
			6.___
	7.___		
		8.___	
			9.___
	10.___		
		11.___	
			12.___
	13.___		
		14.___	
			15.___
		16.___	
	17.___		
Total	Tr=	Cn=	Lg=
Possible range	6-30	6-30	5-25

Figure 2. Countinued.

1.	Age:		
2.	Gender:		
3.	Have you been in recovery?		
4.	If YES for how long?		
5.	Have you been in treatment?		
6.	If YES what type of treatment?		
7.	Emotions are not important in life	TRUE	FALSE
8.	Family systems are rigid and don't evolve	TRUE	FALSE
9.	I can run across water	TRUE	FALSE
10.	Addiction is a form of loss of control	TRUE	FALSE
11.	Negative core beliefs are unhealthy	TRUE	FALSE
12.	Addiction is not a disease	TRUE	FALSE
13.	Emotions are not important in life	TRUE	FALSE
14.	People suffering from addiction may think like criminals as a result of the denial process	TRUE	FALSE
15.	I can easily carry a car	TRUE	FALSE
16.	Codependency is not a form of addiction	TRUE	FALSE
17.	Family members need treatment as well	TRUE	FALSE
18.	I was on the cover of several magazines last month	TRUE	FALSE
19.	There are signs of relapse before one actually returns to use	TRUE	FALSE
20.	Core belief systems can be the main driver for people to either react or respond in a particular way to a situation	TRUE	FALSE
21.	Treatment should only focus on the addicted person	TRUE	FALSE
22.	Codependency can be explained by learned helplessness	TRUE	FALSE
23.	Irrational decisions are sometimes a defense mechanism people with addictions tend to develop	TRUE	FALSE
24.	Dysfunctional parenting does not cause unhealthy emotional responses	TRUE	FALSE
25.	Codependency can be unhealthy and helps condition unwanted behavior	TRUE	FALSE

Figure 3. Pre and post achievement test.

M /F
Age :
Religion :
Marital Status :
Relationship to the client in treatment :

1. Duration : 40-60 minutes
   Primary goal : To evaluate participants views of the Family Book. The interviews will focus mainly on gathering information/feedback on knowledge acquired and the ability to apply the knowledge in real life time. Topics focused on are mainly topics in the book, application of the knowledge acquired and ability to influence other people (refer to Objective 3 in the mapping grid)

2. Verbal and written consent.
   Consent obtained from the participant.
   Consent NOT obtained from the participant.

3. Warming up and building a rapport.
   Building a relationship by asking general questions to gain some trust and allow the interviewee to warm up. Questions revolve mainly around experiences and perspective on self and family.
   - Tell me more about yourself?
   - How many of you at home?
   - Where were you born?
   - Where did you attend school?
   - How was your experience growing up?
   - How long have you known the client?
   - What is the primary relationship

4. Experience with addiction and loved one
   - Do you feel your loved one has an addiction?
     - If YES. Ask what addiction means?
     - If NO. Ask why not?
   - When did you first realize he / she had an addiction problem?
     - Where were you when you it first hit you?
     - How did you feel then and how do you feel now?
     - Who else knows about the addiction in the family?
   - What previous attempts taken to help loved one?
     - What were the differences in treatment approaches
     - How long were changes (if any) observed in their loved ones?
     - What were the changes observed?
   - Has your loved one been in trouble with the law?
     - If YES. Elaborate on when, how and outcomes of the consequences
     - If NO. Ask if respondent feels their loved one will get into trouble with the law anytime soon.
   - Family History
     - Can explain if there is anyone else in the family who had addiction / mental health issues?
     - If YES. Ask for the relationship with the other family member.
   - What are you expecting from treatment this time?
     - Expectations from the loved one post treatment
     - Expectations on self and family post treatment

5. Family Work book Interview
   Objective 1
   - How was the overall perception of the workbook?
     - GOOD. What was helpful and how?
     - AVERAGE. What could have helped make reading better experience?
     - NEEDS IMPROVEMENT. What was not helpful?

   Objective 2
   - How do you think you may have changed as a result of the addiction?

Figure 4. Semi structured interview guide. An evaluation study: family workbook.

I have learned to move on in life … I studied and got a job … I care for the rest of my family and want to help families with similar problems … (71-year-old female son in residential treatment).

Objective 3: evaluate ability to apply knowledge

The knowledge application the respondents all shared were understanding that addiction is a disease, a belief system which

- Prior to the admission into treatment.
- Post admission from treatment.

- How have the rest of the family members changed as a result of the addiction?
  - Prior to the admission into treatment.
  - . Post admission from treatment.

- How have you taken care of yourself?
  - Mentally
  - Medically
  - Physically

- Do you believe addiction is a disease?
  - If YES. How has this impacted your belief system?
  - If NO. How has this impacted your belief system?

Objective 3

- What were the topics from the book you could identify with?
  - Explain how the topics were relevant to you from the below areas:
    - Skills acquired from the topics (List the topics and the skills)
    - Change in your belief system (If any)
    - Self - esteem and how you feel about yourself now (The topics that effected the skills)
    - What skills have you acquired now. (List out the skills)
    - Are you able to make healthy relationships now? (Yes/No. If YES to elaborate with the next set of questions below)
    - How are you taking care of yourself now? (Explain the topics that helped)
- How are you applying the knowledge now in your life; mainly in the below areas:
  - The skills (Explain the skills)
  - The shift in your self-esteem (Explain how the shift happened and when: if any)
  - Resilience, strengths and hope you have now.

  - How are you building relationships? (How did the knowledge help in building relationships)
- Are you able to help others now? If YES, continue with the below questions:
  - What specific belief systems are helping you work with others?
  - Do you believe you are able to help others feel good about themselves, if YES, please explain:

Figure 4. Countinued.

Table 1. Descriptive statistics of pre and post results of the achievement tests.

Achievement tests %	*N*	Range	Mean	Std. Deviation
Pre test	42	8–20	88.35	10.751
Post test	42	10–20	92.48	6.487

helps the family as a whole, and the ability to help others who have similar addiction problems in their family.

Additional salient themes emerged based on the mapping grid (Figure 1) namely, resilience and helping others:

Topics in the book and relationship to real life

Resilience

… I need to practice assertiveness now …

> … I have become more resilient and have hope … now I can step away from the fear and do more things … with more confidence (47-year-old Malaysian female, brother received treatment).

Application of knowledge acquired

Resilience

> … as far as resilience is concerned, I am getting better. That's why I work the whole day and don't want to think about things

… I don't have that much fear now that someone is going to affect my brother ….

> I know now that going back to the past and thinking about the past … is absolutely fine … (47-year-old Malaysian female, brother received treatment).

Influencing or helping others

Resilience and helping others

> … my belief system about being critical and the topics in the book have helped me to understand this and build better relationships.

... it is not impacting relationships in a very big way and I am aware of it.

> ... the knowledge in the book has helped me. Everyone should read it (71-year-old female, son in residential treatment).

> ... I am able to advise others when I observe the problem. Sometimes family members don't know they have a problem. I am able to tell them there is hope and where to go to seek help.

> ... hope is an important belief system that is helping me to help others ... (47-year-old Malaysian female married, brother received treatment).

Discussion

This mixed methodology study of a workbook for family members with a loved one with substance-dependent disorders is the first of its kind in Malaysia. A key aim of this study was to evaluate the impact this workbook has on family members to develop skills to better manage relationships. Findings from the pre- and posttest evaluations revealed a significant increase in knowledge acquired with three salient themes: codependency, the disease model, and belief system. Interview data show how AFMs better understood the concept of codependency which indirectly allowed them to revisit their belief system and better accept the situation. Comments also mentioned moving on from self-neglect to being able to take care of themselves mentally and physically. These strengths appeared helpful in changing the belief system in order to better build boundaries and increase self-esteem, which indirectly facilitates better relationship-building with the substance-dependent person.

Findings from the statistical analysis and semi-structured interviews both indicate a potential for behavior change as a result of knowledge acquired from the workbook, and the ability to apply the knowledge in real-life situations. As participants in this study voluntarily admitted their loved ones into treatment, motivation to change is assumed to be higher than those receiving mandated treatment. This readiness by clients is line with Bohart and Tallman's (1999) assumption about the importance of clients' active involvement in order for psychotherapy to be successful, and Prochaska and DiClemente's (1992) proposition on the importance of clients' readiness and motivation for change. This intrinsic motivation is speculated to be a drive in sharing the strengths with others.

The primary reasons cited by the family for seeking treatment are the inability to manage their loved one's substance dependency and poor relationships at home. Some comments expressed the struggles to draw boundaries and be assertive which could be associated with a more passive Asian culture. Baharudin et al. (2013) explain the Malaysian culture as being more collectivistic where the substance misusers stay connected with their family, possibly complicating boundaries to be drawn. There were mixed responses about influencing or helping others but the responses clearly stated the change in their own belief system as a result of the contents in the book and having hope.

Participants claimed they were satisfied with the contents, topics, and logistics employed (the mandalas). Though we need to take into consideration this finding may not be generalizable *to a wider population* due to the sample demographics. Unlike government-run treatment *provision*, clients in private treatment come from a higher socioeconomic background. This cohort also have a higher educational attainment than the general population which may have an impact on the ability to grasp and accept concepts. This study shows significant findings in knowledge acquired but the extent to which understanding is internalized and developed within the family dynamics is debatable. The semi-structured interviews report changes in attitudes and intention to change behavior but do not capture actual change. This limitation will be addressed with a quantitative follow-up study *planned* after 1 year to measure behavior change *which will also explore whether the changes are more evident in social or psychological areas as well as changes in subjective well-being or quality of life. Additionally, the distribution of the workbook to a range of Asian treatment settings presents an opportunity to widen the study cohort and context and compare findings across demographic and cultural differences.*

The World Health Organization (2014) reports a gap in identifying the impact addiction has on family members. Copello et al. (2010) suggested that the experience of living with somebody with problematic substance use is similar to living with someone with terminal illness. It is estimated that, for each person with problematic substance use, one family member is also affected (Orford et al., 2013). This ratio could be potentially higher in Asian countries where extended families live together. Keshavarz and Baharudin (2009) *explained the collectivistic nature of Malaysian parents as being similar to other parents from collectivistic countries thus making it possible to employ the findings from this study with a collectivistic culture*. One of the key findings in this study is how the contents in the book have improved family members' knowledge of addiction effects on the family and helped to create a belief that change is possible. As addiction affects both the individual and the family dynamics, it is important to adopt a holistic treatment approach, as a common challenge for treatment providers is getting family members to attend workshops or therapy sessions.

Conclusion

This study backs findings from earlier research on the need for family and substance misusers to be involved in treatment (Velleman & Templeton, 2003) as well as the importance of service user and carer involvement in research to ensure the treatment outcomes are specific to meet client's needs (Staley, et al., 2013). Findings from this study not only open up new opportunities for policy makers in Malaysia to develop culture-specific treatment for AFMs, it can also have an impact in Western practice settings as a result of the multicultural nature of Western communities.

Acknowledgments

This work is not supported by any grant.

ORCID

Prem Kumar Shanmugam http://orcid.org/0000-0001-7809-4965

References

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders (5th ed.)*. Author.

Baharudin, D. F., Hussin, A. H. M., Sumari, M., Mohamed, S., Zakaria, M. Z., & Sawai, R. P. (2013). Family intervention for the treatment and rehabilitation of drug addiction: An exploratory study. *Journal of Substance Use*, 1–6. https://doi.org/10.3109/14659891.2013.799239

Beckwith, P. M. (2014). Mindfulness and Mandalas: Alternative therapeutic techniques for AOD adolescents. Epistimi, Capitol University's Undergraduate Research Journal.

Bohart, A. C., & Tallman, K. (1999). *How clients make therapy work*. American Psychological Association.

Carlson, N. R. (2010). *Psychology the science of behaviour*.Pearson.

Carnes, P. (1997). *The betrayal bond, breaking free from exploitative relationships* Deerfield Beach. Health Communications.

Copello, A., Templeton, L., & Powell, J. (2010). The impact of addiction on the family: Estimates of prevalence and costs. *Drugs: Journal of Education, Prevention and Policy*, *17*(S1), 63–74. https://doi.org/10.3109/09687637.2010.514798

Copello, A., Velleman, R., & Templeton, L. (2005). Family interventions in the treatment of alcohol and drug problems. *Drug & Alcohol Review*, *24*(4), 369–385. https://doi.org/10.1080/09595230500302356

Cox, N. A. (2019). *Prospective and deductive analysis tool for qualitative inquiry into social capital [updated]. [Online]*. Manchester Metropolitan University (Artefact). Retrieved from http://e-space.mmu.ac.uk/622851/

Ghani, S. A., Zamani, Z. A., Rahman, R. M. A., Zainal, A. H., & Sulaiman, W. S. W. (2008). Family functioning and its relation with self-esteem among drug addicts. *Journal Antidadah Malaysia*, *3*, 91–106.

Keshavarz, S., & Baharudin, R. (2009). Parenting style in a collectivistic culture of Malaysia. *European Journal of Social Sciences*, *10*(1), 66–73. http://Users/solace/Downloads/Prof-somayeh-collectivistculture.pdf

Kirkpatrick, D. (1996). Evaluation. In R. L. Craig & L. R. Bittel (Eds.), *Training & development handbook. American society for training and development*. McGraw-Hill Book Co.

Mazlan, M., Schottenfeld, R. S., & Chawarski, M. C. (2016). New challenges and opportunities in managing substance abuse in Malaysia. *Drug Alcohol Dependence*, *25*, 473–478.

Mellody, P., Miller, A., . W., & Miller, J., . K. (2003). *Facing codependence, what is it, where it comes from, how it sabotages our lives*. Harper Collins Publishers.

National Anti-Drugs Agency (2017). *Statistics of addicts by case status. National Anti Drugs Agency*. Ministry of Home Affairs. Retrieved from: https://www.adk.gov.my/en/public/drugs-statistics/

Orford, J., Velleman, R., Natera, G., Templeton, L., & Copello, A. (2013). Addiction in the family is a major but neglected contributor to the global burden of adult ill-health. *Social Science and Medicine*, *78*(1), 70–77. https://doi.org/10.1016/j.socscimed.2012.11.036

World Health Organization. (2014). *Global status report on alcohol and health. World Health Organization*. [Online}. WHO Press. Retrieved from: http://apps.who.int/iris/bitstream/10665/112736/1/9789240692763_eng.pdf

Rane, A., Church, S., Bhatia, U., Orford, J., Velleman, R., & Nadkarni, A. (2017). Psychosocial interventions for addiction-affected families in low and middle income countries: A systematic review. *Addictive Behaviors*, *74*, 1–8. https://doi.org/10.1016/j.addbeh.2017.05.015

Shanmugam, P. K. (2019). Exploring trends and challenges from mandated treatment to voluntary treatment outcomes in addiction treatment in Malaysia: Moving toward a person-centered service provision. *Journal of Substance Use*, *25*(2), 141–145. https://doi.org/10.1080/14659891.2019.1664669

Staley, K., Kabir, T., & Szmukler, G. (2013). Service users as collaborators in mental health research; less stick, more carrot. *Journal of Psychological Medicine*, *43*, 1121–1125. https://doi.org/10.1017/S0033291712001663

The World Bank (2018). *Working towards a world free of poverty. How does the World Bank classify countries? [Online]*. Retrieved from: https://datahelpdesk.worldbank.org/knowledgebase/articles/378834-how-does-the-world-bank-classify-countries

Velleman, R., & Templeton, L. (2003). Alcohol, drugs and the family: Results from a long-running research programme within the UK. *European Addiction Research*, *9*(3), 103–112. https://doi.org/10.1159/000070978

Publication eight

Shanmugam, P. K. (2019). Exploring trends and challenges from mandated treatment to voluntary treatment outcomes in addiction treatment in Malaysia: moving towards a person-centred service provision? *Journal of Substance Use*, *25* (2) : 141-145. DOI: 10.1080/14659891.2019.1664669

29 reads and research interest score of 0.5 on Research Gate.

4 citations on Google Scholar

17 views and 7 downloads on Academia.edu

Journal of Substance Use

ISSN: 1465-9891 (Print) 1475-9942 (Online) Journal homepage: https://www.tandfonline.com/loi/ijsu20

Exploring trends and challenges from mandated treatment to voluntary treatment outcomes in addiction treatment in Malaysia: moving toward a person-centered service provision

Prem Kumar Shanmugam

To cite this article: Prem Kumar Shanmugam (2019): Exploring trends and challenges from mandated treatment to voluntary treatment outcomes in addiction treatment in Malaysia: moving toward a person-centered service provision, Journal of Substance Use, DOI: 10.1080/14659891.2019.1664669

To link to this article: https://doi.org/10.1080/14659891.2019.1664669

Published online: 26 Sep 2019.

JOURNAL OF SUBSTANCE USE
https://doi.org/10.1080/14659891.2019.1664669

Taylor & Francis
Taylor & Francis Group

Exploring trends and challenges from mandated treatment to voluntary treatment outcomes in addiction treatment in Malaysia: moving toward a person-centered service provision

Prem Kumar Shanmugam

Department of Psychology, Manchester Metropolitan University, UK; Solace Asia, Kota Kinabalu, Malaysia

ABSTRACT

Background: Malaysia has a history of taking a zero tolerance and persecutory mandated treatment approach to substance use, but a progressive harm reduction policy due to HIV risk has introduced more person-centered understanding of substance use and the need for treatment engagement. Method: This discussion paper presents recent and current substance misuse service developments in Malaysia. It discusses the need for continued development of services toward person-centered and recovery focused approaches while reducing the continuing threat of HIV. Results: Treatment approaches in the C&Cs reveal effectiveness of treatment with reduced relapse rates and treatment satisfaction. Though the treatment approach and policy developments in Malaysia mirrors the Western development of addiction policy, it needs to be able to meet specific psychosociospiritual needs of the Malaysian population. Conclusion: A case is made here for the continuing development of service provision that takes a holistic approach, and a policy stance that enables a recovery-oriented philosophy to develop in Malaysia.

ARTICLE HISTORY
Received 11 March 2019
Revised 2 July 2019
Accepted 31 August 2019

KEYWORDS
Mandated treatment; voluntary treatment; addiction treatment; harm reduction; Malaysia

Background

Malaysia is a multiethnic nation with a total population of approximately 32 million comprising 61.7% Malays, 20.8% Chinese, 6.2% Indians, 0.9% others and 10.4% non-citizen (Malaysia Demographic Profile online, 2018). Boasting a Gross Domestic Product (GDP) value at RM1,353 trillion in 2017, as reported by the Chief Statistician of Malaysia, (The Star online, 2018), Malaysia is considered as having one of the best health-care systems with the public sector medical care among a majority of the developing countries (Mazlan, Schottenfeld, & Chawarski, 2006).

Ghani et al. (2015) explained the lack of evidence-based treatment, difficulty accessing treatment and proper care in the Community Drug Detention Centers (CDDC) in Malaysia as a motivation for the government to review the policies and improve access to admission, along with reducing detention and forced rehabilitation methods. Cure and Care Centers (C&C) were introduced to replace the mandated approach with the CDDC. Wegman et al. (2017) found evidence that people on methadone treatment in CDDCs had higher relapse rates to opioids upon release from the centers as compared to those on methadone treatment in the C&Cs. Methadone treatment is employed as a form of Opioid Substitution Therapy (OST) mainly introduced to manage heroin addiction and related problems in Malaysia. The Ministry of Health (2008) reported that there was close to 10% HIV prevalence in the CDDCs as compared to the 6% among incarcerated prisoners (Khan et al., 2018; UNGASS, 2010; Zahari et al., 2010). This finding was 24 times the 0.41% reported HIV cases in the community (Malaysia Ministry of Health, 2012). On the other hand, the relapse rates of people to their drug of choice 1 year after their release from the CDDCs was reported at 70%-90% (Open Society Institute, 2010; Reid, Kamarulzaman, & Sran, 2007; UNODC, 2010; World Health Organization, 2009).

These findings led to the shift in the government's policies to review the punitive method of managing addiction and accept the harm reduction approach with the use of OST followed by the voluntary treatment approach with the birth of the C&Cs. Though still in its infancy stage, the C&Cs seem to be able to produce positive outcomes (Khan et al., 2018; Krishnan et al., 2016).

Krishnan et al. (2016) found polysubstance use to be common among the residents in the C&C while amphetamine-type stimulants (ATS) use more prevalent mainly closer to the Thai border and the Sabah and Sarawak states (Khan et al., 2018). Al-Darraji et al. (2014) found evidence that opioid was more prominently used in the C&Cs in Kuala Lumpur. This confirms the UNODC (2011) findings in their report claiming ATS use as a fast-growing problem in not only Malaysia but throughout East and South East Asia. Vicknasingam, Narayanan, and Navaratnam (2010) reported that 60% of opioid IDUs in Malaysia have reported lifetime ATS use while 29% claim to be injecting ATS. This form of IDU has an increased risk of HIV transmission for the ATS users, added to heroin IDUs who are already at high risk (Chawarski, Vicknasingam, Mazlan, & Schottenfeld, 2012; Vu et al., 2016).

ATS users are further exposed to HIV infection as a result of the increased energy to engage in sexual activities, impaired judgment leading to unsafe sexual practices as well as the sharing of equipment (Colfax et al., 2010; Ralphs & Gray, 2017). Lim, Akbar, Wickersham, Kamarulzaman, and Altice (2018), on the other hand, reported an increase in ATS use among men who have sex

CONTACT Prem Kumar Shanmugam premkumarshanmugam@yahoo.com Psychology, Manchester Metropolitan University, No 5 Lorong Laman Hijau 1, Taman Laman Hijau off Jalan Kepayan Kobusak, Kepayan, Kota Kinabalu 88300, Malaysia.

with men (MSM) in Asia Pacific and South East Asia. "Chemsex" explained as intentionally abusing illicit substances mainly for engaging in sexual pleasures, is rapidly gaining popularity among the MSM community in Malaysia, where drug use and homosexuality is not only illegal but also heavily stigmatized, ranging from 7.0% in Malaysia to 17.6% in Thailand (Lim et al., 2018).

The drug profile of patients in Malaysian treatment centers seem to differ with varying psychosocial, medical and psychiatric needs. Subcultures in the Southeast Asian and even Malaysian regions, like the MSM community, for example, have specific norms and practises which are not similar to the Western countries. A challenge for evidence-based treatment practice in Malaysia is that existing evidence does not represent Malaysian cultures or contexts.

History of treatment approaches in Malaysia

Baldwin, Thomson, Dorabjee, and Kumar (2012) stated that it was common to incarcerate people who use drugs (PWUD) in countries in SE Asia, including Malaysia where, drug addiction treatment was managed by the Ministry of Internal Security until 2005. The Malaysian National Drug Policy (NDP) was introduced in 1983 and later revised in 1996 as a result of the government declaring drug abuse a national threat (Mohamed, 2012). The initial 1983 act was intended to sanction drug users to undergo mandated drug rehabilitation in the government run centers known as Pusat Serenti or the Narcotic Addiction Rehabilitation Centers. Tanguay (2011) mentioned that Pusat Serenti was then the mandated compulsory drug detention centers (CDDC) and operated by the Ministry of Home Affairs under the National Anti-Drug Agency (NADA) also known as Agensi Anti Dadah Kebangsaan [AADK] (NADA, 2017). At that point of time, the primary response to addiction was long-term incarceration as well as abstinence from any use and the capital punishment for drug trafficking (Mazlan et al., 2006).

Fu, Bazazi, Altice, Mohamed, and Kamarulzaman (2012) declared that there were 6,658 people detained in 28 CDCC's throughout Malaysia in 2010 while experiencing not only poor medical treatment but were also exposed to corporal punishment (Fu et al., 2012; Ghani et al., 2015; Mohamed, 2012). At the same time, treatment approaches were clearly ineffective as the reported relapse rates to drug use upon 1 year of discharge range from 70% to 90% (Khan et al., 2018; WHO, 2009; UNGASS. Country progress report, 2010; Zahari et al., 2010). Mohamed (2012, p. 228) in a study titled "Mandatory assessment of drug users in Malaysia", concluded that Malaysia's mandatory assessment methods presented several restrictions on the constitutional rights of the detainee mainly; (1) arbitrary arrest; (2) unnecessarily prolonged period of detention; (3) lack of proper medical treatment during detention; (4) unsatisfactory medical examination and (5) noncompliance to due process.

Fu et al. (2012) declared that there were 6,658 people detained in 28 CDCC's throughout Malaysia in 2010 while experiencing not only poor medical treatment but were also exposed to corporal punishment (Ghani et al., 2015; Fu et al., 2012; Mohamed, 2012). With reports from WHO (2009) announcing relapse rates upon 1 year of discharge from CDDC peaking at 70% to 90%, questions were raised on the approach and effectiveness of the treatment methods.

Werb et al. (2016) explain CCDU as mandated treatment for people who use drugs but not necessarily dependent. Some of the common human rights violations are listed as insufficient medical attention, forced labor, physical and sexual abuse while some people were reported to be held in detention for up to 5 years without any proper clinical confirmation of drug dependence (Amon, Pearshouse, Cohen, & Schleifer, 2013; Hall et al., 2012; Khan et al., 2018; Werb et al. 2016). Amon et al. (2013) report that the therapeutic approaches some CCDUs claim to be employing are not evidence-based, while relapse may result in further punishment. In 2012, the Human Rights Watch, in a statement released by a body comprising 13 United Nation entities called for the immediate shut down of CDDCs and the release of all those held in these compulsory centers (UNODC/ESCAP/UNAIDS, 2012). Khan et al. (2018) and Tanguay et al. (2015) explained that Malaysia is one of the two countries which has begun the process of transitioning the CDDC system and moving into more evidence-based treatment which is in line with human rights. Though there is little clear empirical evidence or data of the effectiveness of this new approach (Tanguay et al., 2015), there is a growing need to identify and evidence more humane and person-centered treatment approaches that meet the cultural needs of the Malaysian population.

Treatment: harm reduction

The Malaysian government introduced a pilot substitution therapy treatment initiation in 2003 which yielded successful results (Reid et al., 2007; Tanguay, 2011). One of the first few revisions made to the policies in regards to the addiction problem, was the introduction to the 2005 Strategic Plan to reduce HIV/AIDS as a result of not meeting the UN Millennium Goals in regards to drug users acquiring HIV (Ghani et al., 2015). Following this, harm reduction initiatives began to attract the attention of policy makers with the implementation of the needle and syringe exchange programmes (NSEP) and the opioid substitution therapy (OST) (Reid et al., 2007). Tanguay (2011) reported a decrease in mandated drug abusers sent to rehabilitation centers since the introduction of the harm reduction programme in 2005. Upon witnessing the effectiveness of harm reduction programmes, other government agencies began to incorporate the HIV harm reduction initiatives and even introduced OST in the local prisons (Ghani et al., 2015; Wickersham, Marcus, Kamarulzaman, Zahari, & Altice, 2013; Wickersham, Zahari, Azar, Kamarulzaman, & Altice, 2013).

Treatment options: voluntary treatment

As a result of the harm reduction programmes, AADK began to review their polices and decided to transition the CDDC into voluntary treatment centers known as Cure and Care (C&C) centers employing a more comprehensive approach with a range of services such as prevention, treatment, and rehabilitation (Ghani et al., 2015; National Express Malaysia, 2011). Tanguay (2011) mentioned that the C&C assured voluntary treatment with no charges and free of any legal implications.

The formation of the C&Cs was a critical transition in the government's views on addiction mainly because it was from the Ministry of Health and the AADK, meaning the law was recognizing treatment as a better approach (Tanguay, 2011). Mental health professionals such as counselors, doctors, psychiatrists began to participate in making clinical decisions instead of the policy makers and the criminal justice system. Furthermore, with this acceptance and integration of the medical and health system, the prevention and treatment of HIV related issues can be better managed. The National Strategic Plan for Ending Aids released by the Ministry of Health Malaysia announced a decline in HIV positive PWUDs from 22.1% in 2009, 18.9% in 2012 to 16.3% in 2014 (Ministry of Health, 2015).

Ghani et al. (2015) suggested introducing a range of services that would meet social and health-related needs in order to attract people to seek treatment in the newly introduced C&Cs. Khan et al. (2018) further stressed two key principles of care: addiction is best treated with a variety of evidence-based interventions, and treatment has to not only be holistic but customized to specific needs as well. The C&Cs claim to be offering mainly services such as MAT (Methadone Assisted Treatment: which is the OST programme), medical health care (Al-Darraji et al., 2014), psychosocial interventions, spiritual programmes, psychiatric treatment, outdoor and physical activities along with group and individual vocational training (Ghani et al., 2015; Khan et al., 2018; Krishnan et al., 2016). OST was not allowed in CDDCs prior to the forming of C&Cs where abstinence was the main focus of treatment (Al-Darraji et al., 2014). The acceptance of OST in the C&Cs as a means of treatment clearly indicated the shift in policies by the government to treat instead of punish people with substance use disorders.

Amon, Pearshouse, Cohen, & Schleifer (2014) stated that the international community applauded and welcomed Malaysia's recognition of the need to transition from the CDDCs to the C&C centers, while Ghani et al. (2015) stressed the urgency for a proper assessment of the actual outcomes of the C&C's services. Amato et al. (2005), Mattick, Breen, Kimber, and Davoli (2009) explained that the OST programmes have been evaluated for their treatment outcomes through various studies but Ghani et al. (2015) emphasized the importance to further assess the various psychosocial aspects influencing addiction treatment, mainly, the value of spirituality, counseling or vocational therapy, social and family integration or problems with the law. Furthermore, Khan et al. (2018) mentioned there was a lack of information on stimulant users seeking treatment in Malaysia and the limited data on treatment outcomes of the C&Cs.

Review of C&C treatment approaches

Krishnan et al. (2016) reported findings from one of the first studies of drug use behavior conducted in the Kelantan state of Malaysia with a convenience sample of 96 participants ($n = 96$) in a voluntary C&C in Kelantan, Malaysia. Data from the study revealed that there was a high rate of ATS use among the participants while also abusing poly-substances. This indicated that OST would only provide positive outcomes with opioids, while some of the substances used could not be detected such as cough syrup and others which are not injected. Cough syrup is generally used for easing withdrawal pains and also possibly acts as a gateway drug to other substances and has not been investigated in Malaysia for its abuse (Krishnan et al., 2016). Overall findings from this study along with qualitative findings by Ghani et al. (2015) revealed high satisfaction rates with the treatment approaches at C&Cs such as psychosocial counseling and recreational activities.

Wegman et al. (2017) reported findings from data on comparing methadone treatment in the C&C versus in CDDCs where patients leaving CDDCs were at higher risk of relapses to opioid use soon after their release thus reinforcing the importance of voluntary treatment for opioid use in the C&C and the need to further study the treatment approaches employed. Khan et al. (2018) claimed to be the first to conduct a quantitative study assessing the reduction in drug use as well as evaluating satisfaction levels of participants attending treatment at the C&C center in Kota Bharu, a state in the east of Malaysia. Originally a CDDC for women, the center was converted into a C&C in 2010. Findings from the study described highest satisfaction levels for addiction treatment, followed by health-care services for addiction and non-addiction related health issues, ability to reduce drug cravings and promoting healthy family relationships. Khan et al. (2018) stress the need to have treatment approaches which can address complex needs of drug users seeking treatment and encouraged the migration of all CDDCs to C&Cs in Malaysia.

Discussion

Overall, the outcomes of studies of the C&Cs in Malaysia reveal satisfactory findings and demonstrate greater effectiveness of treatment as measured by reduced relapse rates and treatment satisfaction. However, evidence for the C&Cs is not specific or based on an integrated approach that includes psychosocial or cultural factors related to addiction (Bachireddy et al., 2014; Haddad, Zelenev, & Altice, 2015). Malaysia is a multicultural country with a rapidly developing economy and an active Westernizing population, where acculturation is continuously taking place. Acculturation is explained as the process of absorbing the values and cultures of a new society and this takes place mainly when people migrate into a different society or community and are forced to adapt to the host society while trying hard to maintain their own cultural values (Awde, 2009). Hall and Queener (2007) discussed how culture and the society have an influence on addictions in the community. While Miller and Carroll (2006) suggested that the choice of substance abused and the way it is used vary among various cultures.

Currently, treatment and policy developments in Malaysia mirrors that of Western development of addiction policy of the last 20–30 years toward a more responsive, accessible and recovery-oriented philosophy that favors individual and holistic integrated care. In Malaysia, mental health and psychiatric disorders are classified and established on the International Classifications of Diseases (ICD) as well as the Diagnostic Manual of Mental Disorders (DSM) which is based on Western concepts and cultural influences. Kleinman (1995) argued that cultures have an influence in the presentation and prevalence of mental health disorders and current practice may be addressing this by adopting a form of medical pluralism that

embraces spiritual and traditional concepts as well as western medicine (Razak, 2017). In order to be able to integrate the treatment approaches employed in Malaysia into a more person-centered approach, the Western models need to be further adapted to meet the specific cultural needs of Malaysia as well. This mirroring of Western approaches may be a progressive development of the Malaysian approach to conform to globalized standards with a more humane approach but also relies at present on evidence that is derived from largely Western sources. Malaysia is now ready to create and apply evidence that stems from Malaysian populations and contexts, that is generated from treatment interventions representative of the C&Cs, but also innovative approaches that address cultural and contextual factors such as family dynamics, stigma, spiritual beliefs and psycho-social needs. More studies incorporating variables such as culture and familial influences will be essential in identifying an integrated treatment model which would meet the specific needs of the Malaysian population.

Conclusion

This paper evidences and acknowledges the progress Malaysia has made in managing the drug use epidemic in the country. Over the years, the policyholders appear to have taken a paradigm shift in their concept of treatment from the draconian punitive approach to the current voluntary treatment movement. This paper suggests future research to focus on identifying a person centered treatment model that is specific to Malaysian cultures to fill in the gap to achieve a holistic treatment model which would address the addiction issues and the psychosocial needs of the problem users while improving healthcare in Malaysia and other regions.

Acknowledgments

Thank you, Dr. Lucy Webb, Senior Lecturer, and Supervisor, from Manchester Metropolitan University, for patiently guiding me through this publication.

Funding

This research did not receive any grant from funding agencies in the public, commercial or not-for-profit sectors.

ORCID

Prem Kumar Shanmugam http://orcid.org/0000-0001-7809-4965

References

Al-Darraji, H. A., Wong, K. C., Yeow, D. G., Fu, J. J., Loeliger, K., Paiji, C., & Altice, F. L. (2014). Tuberculosis screening in a novel substance abuse treatment center in Malaysia: Implications for a comprehensive approach for integrated care. *Journal of Substance Abuse Treatment*. doi:10.1016/j.jsat.2013.08.023

Amato, L., Davoli, M., Perucci, C. A., Ferri, M., Faggiano, F., & Mattick, R. P. (2005). An overview of systematic reviews of the effectiveness of opiate maintenance therapies: Available evidence to inform clinical practice and research. *Journal of Substance Abuse Treatment*, *28*(4), 321–329. pii: S0740-5472(05)00049-8. doi:10.1016/j.jsat.2005.02.007,

Amon, J. J., Pearshouse, R., Cohen, J., & Schleifer, R. (2013). Compulsory drug detention centers in China, Cambodia, Vietnam, and Laos: Health and human rights abuses. *Health and Human Rights*, *15*(2), 124–137.

Amon, J. J., Pearshouse, R., Cohen, J. E., & Schleifer, R. (2014). Compulsory drug detention in East and Southeast Asia: Evolving government, UN and donor responses. *International Journal of Drug Policy*, *25*(1), 13–20. doi:10.1016/j.drugpo.2013.05.019

Awde, N. (2009). The influence of cultural values on the parent-child interaction patterns of families from an Asian background. *ARECLS*, *6*, 01–17.

Bachireddy, C., Bazazi, A. R., Kavasery, R., Govindasamy, S., Kamarulzaman, A., & Altice, F. L. (2014). Attitudes toward opioid substitution therapy and pre-incarceration HIV transmission behaviors among HIV- infected prisoners in Malaysia: Implications for secondary prevention. *Drug and Alcohol Dependence*, *116*(1–3), 151–157. [PubMed: 21232882]. doi:10.1016/j.drugalcdep.2010.12.001

Baldwin, S., Thomson, N., Dorabjee, J., & Kumar, S. (2012). *Compulsory detention of people who use drugs in Asia looking for alternatives*. Retrieved from https://www.unodc.org/documents/southeastasiaandpacific/Publications/2015/hiv/Discussion_Paper_on_Transition_from_CCDUs_Edited_Final4_04Sept15.pdf

Chawarski, M. C., Vicknasingam, B., Mazlan, M., & Schottenfeld, R. S. (2012). Lifetime ATS use and increased HIV risk among not-in-treatment opiate injectors in Malaysia. *Drug and Alcohol Dependence*, *124*, 177–180. doi:10.1016/j.drugalcdep.2011.12.024

Colfax, G., Santos, G. M., Chu, P., Vittinghoff, E., Pluddemann, A., Kumar, S., & Hart, C. (2010). Amphetamine-group substances and HIV. *Lancet*, *376*, 458–474. [PubMed: 20650520]. doi:10.1016/S0140-6736(10)60753-2

Fu, J. J., Bazazi, A. R., Altice, F. L., Mohamed, M. N., & Kamarulzaman, A. (2012). Absence of antiretroviral therapy and other risk factors for morbidity and mortality in Malaysian compulsory drug detention and rehabilitation centers. *PloS One*, *7*(9), e44249. doi:10.1371/journal.pone.0044249

Ghani, M. A., Brown, S. E., Khan, F., Wickersham, J. A., Lim, S. H., Dhaliwal, S. K., … Altice, F. L. (2015). An exploratory qualitative assessment of self-reported treatment outcomes and satisfaction among patients accessing an innovative voluntary drug treatment centre in Malaysia. *International Journal of Drug Policy*, *26* (175–182). doi:10.1016/j.drugpo.2014.10.002

Haddad, M. S., Zelenev, A., & Altice, F. L. (2015). Buprenorphine maintenance treatment retention improves comprehensive preventive primary care outcomes when integrated into federally-qualified health centers. *Journal of Urban Health*, *92*, 193–213. [PubMed: 25550126]. doi:10.1007/s11524-014-9924-1

Hall, D. H., & Queener, J. E. (2007). Self – Medication hypothesis of substance use: Testing Khantzian's update theory. *Journal of Psychoactive Drugs*, *39*(2), 151. doi:10.1080/02791072.2007.10399873

Hall, W., Babor, T., Edwards, G., Laranjeira, R., Marsden, J., Miller, P., … West, R. (2012). Compulsory detention, forced detoxification and enforced labour are not ethically acceptable or effective ways to treat addiction. *Addiction*, *107*(11), 1891–1893. doi:10.1111/add.2012.107.issue-11

Khan, F., Krishnan, A., Ghani, M. A., Wickersham, J. A., Fu, J. J., Lim, S. H., … Altice, F. L. (2018). Assessment of an innovative voluntary substance abuse treatment program designed to replace compulsory drug detention centers in Malaysia. *Substance Use Misuse*, *53*(2), 249–259. doi:10.1080/10826084.2016.1267217

Kleinman, A. (1995). Do psychiatric disorders differ in different cultures? The methodological questions. In J. Veroff & N. Goldberger (Eds.), *The culture and psychology reader* (pp. 631–651). New York: New York University Press.

Krishnan, A., Brown, S. E., Ghani, M., Khan, F., Kamarulzaman, A., & Altice, F. L. (2016). Pre-treatment drug use characteristics and experiences among patients in a voluntary substance abuse treatment center in Malaysia: A mixed methods approach. *Substance Abuse*, *37*(4), 542–549. doi:10.1080/08897077.2016.1146648

Lim, S. H., Akbar, M., Wickersham, J. A., Kamarulzaman, A., & Altice, F. L. (2018). The management of methamphetamine use in sexual settings among men who have sex with men in Malaysia. *International Journal of Drug Policy*, *55*, 256–262. doi:10.1016/j.drugpo.2018.02.019

Malaysia Demographic Profile (2018). *Index Mundi*. Retrieved from https://www.indexmundi.com/malaysia/demographics_profile.html

Malaysia Ministry of Health. (2012). *Malaysia 2012 global AIDS response*. Retrieved from http://www.moh.gov.my/images/gallery/Report/GLOBAL_AIDS_Endorsed_DG.pdf

Mattick, R. P., Breen, C., Kimber, J., & Davoli, M. (2009). Methadone mainte- nance therapy versus no opioid replacement therapy for opioid dependence. *Cochrane Database of Systematic Reviews*, *3*, CD002209. doi:10.1002/14651858.CD002209.pub2

Mazlan, M., Schottenfeld, R. S., & Chawarski, M. C. (2006). New challenges and opportunities in managing substance abuse in Malaysia. *Drug and Alcohol Dependence*, *25*, 473–478. doi:10.1080/09595230600883354

Miller, W. R., & Carroll, K. M. (2006). *Rethinking substance abuse; What the science shows, and what we should do about it*. New York: Guilford.in relapse risk situations among adolescent substance abusers following treatment. *Journal of Adolescent Chemical Dependency*, *1*, 95–116.

Ministry of Health. (2008). Summary of HIV and AIDS cases reported by source. Malaysia: 1988–2008. Retrieved from http://ptfmalaysia.org/v2/pdf/malaysia_aids_stats_for_2009.pdf

Ministry of Health. (2015). *National strategic plan on ending aid 2016-2030*. Malaysia: Author.

Mohamed, S. (2012). Mandatory assessment of drug users in Malaysia: Implications on human rights. *Drugs: Education, Prevention & Policy*, *19*(3), 227–233. doi:10.3109/09687637.2012.658887

National Anti-Drugs Agency {NADA}. (2017). *Statistics of addicts by case status*. Retrieved from https://www.adk.gov.my/en/public/drugs-statistics/

National Express Malaysia. (2011, January 8). *Malaysia cure & care clinics receive international recognition*. Retrieved from http://national-express-malaysia.blogspot.com/2011/01/1malaysia-cure-care-clinics-receive.html

Open Society Institute. (2010). *Detention as treatment: Detention of methamphetamine users in Cambodia, Laos, and Thailand*. Retrieved from http://www.opensocietyfoundations.org/sites/default/files/Detention-as-Treatment-20100301.pdf

Ralphs, R., & Gray, P. (2017). *New psychoactive substances: New service provider challenges*. Drugs: Education, Prevention and Policy. 10.1080/09687637.2017.1417352

Razak, A. A. (2017). Cultural construction of psychiatric illness in Malaysia. *Malaysian Journal of Medical Sciences*, *24*(2), 1–5. doi:10.21315/mjms2017.24.2.1

Reid, G., Kamarulzaman, A., & Sran, S. K. (2007). Malaysia and harm reduction: The challenges and responses. *International Journal of Drug Policy*, *18*(2), 136–140. pii:S0955-3959(06)00261-1. doi:10.1016/j.drugpo.2006.12.015,

Tanguay, P., & Drug Policy Consortium. (2011). *IDPC briefing paper-policy responses to drug issues in Malaysia*. Retrieved from http://www.cahrproject.org/wp-content/uploads/2012/03/Policy-responses-to-drug-issues-in-Malaysia.pdf

Tanguay, P., Kamarulzaman, A., Aramrattana, A., Wodak, A., Thomson, N., Ali, R., & Chabungbam, A. (2015). Facilitating a transition from compulsory detention of people who use drugs towards voluntary community-based drug dependence treatment and support services in Asia. *Harm Reduction Journal*, *12*, 31. [PubMed: 26470779]. doi:10.1186/s12954-015-0071-0

The Star online. (2018). *Malaysia's GDP value at RM1.353 trillion in 2017*. Retrieved from https://www.thestar.com.my/business/business-news/2018/07/26/malaysia-gdp-value-at-rm1-353-trillion-in-2017/

UNGASS. Country progress report. (2010). Retrieved from http://data.unaids.org/pub/Report/2010/malaysia_2010_country_progress_report_en.pdf

United Nations Office on Drug and Crime. (2010). *Report of the regional consultation on compulsory centres for drug users in Asia and the Pacific*. Bangkok, Thailand: United Nations Publication.

United Nations Office on Drugs and Crime. (2011). UNODC world drug report. United Nations publication, sales No. E.11.XI.10.2011.

UNODC/ESCAP/UNAIDS. (2012). *Report of the second regional consultation on compulsory centres for drug users in Asia and the Pacific*. Kuala Lumpur, Malaysia: United Nations Office on Drugs and Crime (UNODC), Economic and Social Commission for Asia and the Pacific (ESCAP), Joint United Nations Programme on HIV/AIDS (UNAIDS).

Vicknasingam, B., Narayanan, S., & Navaratnam, V. (2010). The relative risk of HIV infection among IDUs not in treatment in Malaysia. *AIDS Care*, *21*, 984–991. [PubMed: 20024754]. doi:10.1080/09540120802657530

Vu, N. T., Holt, M., Phan, H. T., Le, H. T., La, L. T., Tran, G. M., … de Wit, J. (2016). Amphetamine-type stimulant use among men who have sex with men (MSM) in Vietnam: Results from a socio-ecological, community-based study. *Drug and Alcohol Dependence*, *158*, 110–117. 10.1016/j.drugalcdep.2015.11.016

Wegman, M. P., Altice, F. L., Kaur, S., Rajandaran, V., Osornprasop, S., Wilson, D., & Kamarulzaman, A. (2017). Relapse to opioid use in opioid-dependent individuals released from compulsory drug detention centres compared with those from voluntary methadone treatment centres in Malaysia: A two-arm, prospective observational study. *The Lancet Global Health*, *5*(2), e198–e207. [PubMed: 27964869]. doi:10.1016/S2214-109X(16)30303-5

Werb, D., Kamarulzaman, A., Meacham, M. C., Rafful, C., Fischer, B., Strathdee, S. A., & Wood, E. (2016). The effectiveness of compulsory drug treatment: A systematic review. *The International Journal on Drug Policy*, *28*, 1–9. doi:10.1016/j.drugpo.2015.12.005

WHO. (2009a). *Assessment of compulsory treatment of people who use drugs in Cam- bodia, China, Malaysia and Viet Nam: An application of selected human rights principles*. Geneva, Switzerland: World Health Organization.

Wickersham, J. A., Marcus, R., Kamarulzaman, A., Zahari, M. M., & Altice, F. L. (2013). Implementing methadone maintenance treatment in prisons in Malaysia. *Bulletin of the World Health Organization*, *91*(2), 124–129. doi:10.2471/BLT.12.109132

Wickersham, J. A., Zahari, M. M., Azar, M. M., Kamarulzaman, A., & Altice, F. L. (2013). Methadone dose at the time of release from prison significantly influences retention in treatment: Implications from a pilot study of HIV-infected prisoners transitioning to the community in Malaysia. *Drug and Alcohol Dependence*, *132*(1–2), 378–382. doi:10.1016/j.drugalcdep.2013.01.005

World Health Organization Western Pacific Regional Office. (2009). *Assessment of compulsory treatment of people who use drugs in Cambodia, China*. Malaysia and Viet Nam, Western Pacific Region: An application of selected human rights principles (WHO: Manila). Retrieved from http://idpc.net/sites/default/files/library/WHO_Asia_Compulsory_Treatment.pdf

Zahari, M., Hwan, M., Bae, W., Zainal, N. Z., Habi, L. H., Kamarulzaman, A., & Altice, F. L. (2010). Psychiatric and substance abuse comorbidity among HIV seropositive and HIV seronegative prisoners in Malaysia. *American Journal of Drug and Alcohol Abuse*, *36*(1), 31–38. [PubMed: 20141394]. doi:10.3109/00952990903544828

Chapter 3: Critical reflection of methodological issues, and an indication of the future direction of research.

3.1 Introduction

This body of work has aimed to contribute to the practice evidence in support of a biopsychosociopiritual approach to substance use for application by practitioners in SE Asia. The critical reflection will focus on methodological issues and how the work explores and provides evidence of effectiveness and application to practice, and supports the exchange of evidence between innovative service delivery and disseminating evidence to practitioners. The thesis also argues for an approach that is sensitive to cultural diversity and has cultural sensitivity built-in. Thus, this body of evidence represents the linkage between theory, practice and practice innovation and implementation, aiming for dissemination to a practitioner readership in SE Asia and similar LMICs.

Western approaches to substance use treatment have long relied on biological approaches, such as substitute prescribing, but clinical evidence now highlights the importance of additionally using psychosocial approaches in supporting recovery (i.e. Cooper et al., 2015; EMCDDA, 2014; Smedslund et al. 2011). Miller and Carroll's (2006) clinical evidence shows that social and family relationships can either sustain substance use or encourage help-seeking behaviour, and a review of the clinical evidence indicates the efficacy of family-based interventions for problematic substance use.

Orr and Jain (2014) claim that Global Mental Health (GMH) has had little attention, but there is a growing awareness among the academics, policy and the practitioner communities, and now mental health is embedded in the WHO sustainable development goals (Carr, 2018). Though there are discussions around the differences in treatment approaches in 'developed' and 'developing' worlds, Burns (2012) claims these to be as broad generalizations requiring more specific research into the characteristics of each area or setting, while increasing access to psychiatric treatment may not be the only solution. WHO (2011) revealed findings that few people in LMICs specialize in mental health, while many of them working with mental distress or problematic substance use areas may not be specialists.

This raises many concerns as to the level of expert care being offered to people with problem substance use. In order to successfully tackle problem substance use, a holistic treatment approach is proposed in this thesis. Furthermore, it is my understanding that problem substance use treatment in the SE Asian region is still at an early stage of development. One of the difficulties faced by developing countries is limited research capacity to conduct local studies to identify gaps in treatment delivery and as a result, developing countries struggle to establish evidence that is context-appropriate (Degenhardt, Bucello, Calabria, et al., 2011; Saxena, 2006). The treatment approach employed in the SE Asian region is currently based on Western evidence which in its essence is developed based on the specific psychosocial needs of the population within the Western culture.

3.2 Critical reflection of methodological issues

3.2.1 Publication one: a systematic review

The main objective of this systematic review (SR) was to identify an integrated psychosocial treatment programme which would be able to prevent relapses and reduce social anxiety among substance dependents. Mallett et al. (2012) state that systematic reviews are able to provide reliable, replicable and generalizable results as a result of the rigorous methodologies employed. However, they can also be too structured especially when reviewing and implementing health and social care systems, which are complex and dynamic (Rycroft-Malone, McCormack, Hutchinson et al. 2012). Grant and Booth (2009) declare that, though the SR method is recognized for its rigour, the actual time required to complete the study may not meet the specific time-sensitive needs of decision-making for practitioners and policymakers. Furthermore, the SR methodology has limited potential within the library and information science sector (LIS) due to the finite number of publications. Systematic reviews are known for favouring positivist epistemology, however, the mechanistic approach employed limits interpretation, removing the experience of practitioners and service users and omitting the delivery context, while the inclusion and exclusion criteria narrow the findings to a specific range of studies (Maclure, 2005). This in return can have a limiting impact on the generalizability of the findings. Mallet et al. (2012) critique the systematic review particularly for development evidence due to the lack of primary studies and the heterogeneity of methodologies.

Publication one is labelled a systematic review but used a narrative review (NR) to be more exploratory of heterogeneous evidence. Narrative reviews and systematic reviews can be similar in the sense that both employ meticulous means to provide a comprehensive report incorporating various studies, but since both are written reflectively, there will be some level of bias involved (Yuan & Hunt, 2009). Narrative reviews are a summary of various primary studies providing a comprehensive interpretation based on the reviewer's personal experiences, existing theories as well as models (Campbell Collaboration, 2001; Kirkevold, 1997). Grant and Booth (2009) post that NRs have the capability to share a more broad and comprehensive synthesis of a particular topic. They therefore differ in purpose and methodology to SRs, arguably addressing the limitations presented by SRs for evidence. However, the demand for evidence-based practice in medicine has driven preference for the more rigorous SRs and reduced the status of the narrative review.

The failure of publication one to address the practice issues suggests a need for a different approach that incorporates a broader evidence base. Methodologies such as realist synthesis offer an alternative to both the positivist approach of the SR and NR. For publication one, it is evident that though the intended focus of the paper was based on psychosocial influences, only social anxiety and relapse prevention was discussed. The absence of published evidence limits the findings and generalizability of the study, more so since this review focused on papers published in the West. Employing a realist synthesis approach may have been more effective, notably to allow flexibility and

inclusivity where the outcomes of the review are theoretically transferable (Rycroft-Malone, McCormack, Hutchinson et al., 2012). Realist synthesis has gained recognition in reviewing evidence of effectiveness under specific conditions. Delanty (1997) explains realism as guided by three social science principles: (1) causal explanations are achievable (2) social reality is mainly as interpretative reality of social actors and (3) social actors evaluate their social reality. Pawson (2003) explains how theories are not always able to predict intervention outcomes under all circumstances, but realism explores the underlying mechanisms leading to outcomes under various conditions. This form of realist synthesis seems more appropriate for future study to unpack the intricacies of psychosociospiritual theories and interrelated mechanisms to implement a holistic treatment approach. However, there needs to be a broad base of primary research from contexts transferable to Malaysian population groups in order to carry out a realist synthesis.

As it is, though the last paragraph in publication one suggests a focus for future research, there is a generalization to the Singapore context, which may not be possible. The evidence presented focuses mainly on non-localized publications. In order to be specific to the local Singaporean context, it would have been better to select studies that were transferable/generalisable to a Singaporean context relating more to the population, health delivery systems and social culture similar to Peh, Lim, and Winslow's (2012) review of trends in treatment provision in Singapore.

3.2.2 Publications two and three: Linking theory to practice

Opinion papers are formal essays on a specific topic endorsed with pieces of evidence or examples. Evans (2003) states that expert opinion, though maybe biased, does help identify research priorities. In the case of publications two and three, the exploration of theories in practice contexts assists in positioning the psychosocial approach within the range of interventions relevant to person-centred delivery.

For the purposes of developing evidence for practice, theories and philosophies may be seen not as rigid or strict guidelines driving technology but a moral guide assisting in making responsible decisions, as states Arendt's (1958) pragmatic philosophy, arguing that theories should be linked to the application to ensure their practicality. For practice, theories may also be developed based on need but which have to be flexible, as needs evolve with time. Furthermore, there could be a tendency for academics and practitioners to be selective when identifying theories to support specific requirements. Harrington (2005) argues that theories without real-world evidence would mean; 'Any piece of speculation would have to be deemed as good as another.´(pg. 5). Theories are however an important component in developing evidence-based assumptions. Joas and Knobi (2009) suggest that different schools of thought do at least agree that theories should be understood as generalizations or governing principles that provide underpinning structure.

Though research methodologies and the systematic approaches employed in conducting research provide a structure and guide to ensure the internal validity of the findings, they may lack external validity – applicability to practice. Well supported clinical opinion papers, on the other hand, can provide both the evidential support for internal validity while the professional opinion seams the theories with real-life situational experience, taking into consideration the confounding variables influencing the findings. This combination of academic and clinical evidence helps ensure the findings have theoretical and practice-based validity. In the absence of current evidence of effective practice in SE Asian settings, this combination of Western theory and culturally-specific professional experience can address the evidence needs for practice in this LMIC population. In this way, these publications address objectives 1 and 3 of this thesis in exploring and providing evidence for the effectiveness of the biological and behavioural aspects of treatment in a non-Western context, and they also identify gaps in the evidence in support of culturally sensitive psychosociospiritual approaches and indicate areas for future research.

3.2.3 Publication four: evaluation of practice

This was a quantitative study comparing pre-and-post-measures following the FIRE intervention. There were no qualitative interpretations included which could have helped further clarify the outcomes of the analysis. Short interviews with the participants may have been an option to further validate and give an explanation to the findings from the statistical analysis. Qualitative data collection may also have provided

a cultural sensitivity check by providing insight into Singaporeans' experience of their symptoms and treatment impact. One issue from this paper is the use of a Western-validated tool applied to a Singaporean patient population. The tool used measures depression, anxiety and stress as experienced and interpreted in the West and may not represent a SE Asian experience, or measure accurately their experience due to different concepts of these symptoms. This also highlights the need for culturally sensitive or specific validated tools.

3.2.4 Publications five, six and seven: family context and culture

Publication five is an opinion paper, published in a widely-read journal by professionals in the substance use treatment field, Intervene Magazine. Dissemination of theory and evidence for practice is a crucial role in the theory-practice cycle, to address the theory-practice gap (WHO, 2008). I chose to employ an 'easy read' approach to bridge the theory-practice gap that exists where the academic work can be inaccessible to practitioners due to the academic language employed or the subscriptions the papers are published in. The existence of this gap was further reinforced by the Canadian Institute of Health Research (2013) stressing the need to recognise the importance of knowledge translation (KT), explained as the transfer and integration of information to enhance health practice and health knowledge in the community.

The introduction guides the reader to the two key theories addressed; Learned Helplessness and Trauma Bonding. Citations for both the theories would have helped present the paper with a more academic and evidence-based outlook. Though there was no mention of Learned Helplessness or Trauma Bonding theories in the paper, they will appear in the planned second part of the publication, as suggested in publication five. Dissemination of key applied theories such as relating Learned Helplessness (Carlson, 2010; Seligman, 1975) and Trauma Bonding (Carnes, 1997) to co-dependency was relatively new to the problematic substance use counselling field at the time, and more so to family members, particularly in Malaysia.

Publication six is a workbook aimed at practitioners as a tool for working with clients (service users and their families) within an integrated programme. This workbook is the culmination of the work in this thesis attempting to apply theory to practice, emphasizing the biopsychosociospiritual approach, and meeting the specific cultural needs sensitive to the local context.

The evidence-based concepts presented in the workbook are practice-oriented theories, particularly from Miller and Carroll (2006), conveyed in easy-read format. The concepts in the workbook relate to the biopsychosociospiritual model and how the integrated treatment approach was formed based on this model around the needs of the mostly South Asian clients seen in the residential treatment setting. Again, the aim of sharing the experiences with the readers, (practitioners and family members) was to address the theory-practice gap for practitioners, in a format meaningful to South

Asians. Practitioners are helped in delivering theory-based practice while clients learn about the theory (psychoeducation) and acquire a greater awareness of their own functioning.

It may have strengthened the evidence base to introduce theories such as that of McCrady, Epstein and Sell (2003). They proposed three types of coping response in families with problematic substance use; *tolerant coping,* acceptance of the substance use; *engaged* coping; constantly trying to change the substance use and *withdrawal* coping or ignoring the substance use. Also, evidence from Orford et al. (2013) would further support the paper, by proposing that problem substance impacts on both the individual and relationships with the family, or Adams (2008), who explained how family relationships become dysfunctional with problem substance use. Citations for evidence-based theories such as Mellody (2003) or Bradshaw (1996) describing how the family functions as a system, would have provided support to the claims made mainly in the dissemination of the theory and practice of family work in problematic substance use.

Though the intended readership of the workbook is mainly family members, the workbook is also accessible to academics and practitioners, so it may be useful to provide an evidence-based manual for practitioners to support the use of the workbook detailing the evidence above. Evidence from publication seven could be included, and so too results from the planned follow-up evaluation of the workbook. I intend to draw on and expand concepts such as co-dependency (Mellody, 2003), learned helplessness

(Seligman, 1975) and Trauma Bonding (Carnes, 1997) for the next publication upon gathering data for a one year follow-up from the participants in the evaluation study (publication seven). This will be an extended study focusing further on research objective three, to demonstrate effectiveness in application.

Publication seven presents a mixed methodology evaluation of the workbook comprising exploratory qualitative methods using semi-structured interviews and quantitative pre- and post-test comparison. The pilot study conducted on the evaluation tools helped ensure reliability and validity of the tools and interview questionnaires, though the convenience sampling method for the pilot may not have been applicable to the research problem due to the participants not being relevant to the study. This may reduce the validity of the study (Oppong, 2013). The inclusion and exclusion criteria selecting a sample representative of the population established the target population, and use of a framework to map the qualitative and quantitative data ensured best use of the mixed-method design, improving the breadth and depth of understanding (Patton, 2002).

Though the findings generally were positive and responded to the research objectives, the results may not be generalizable to the overall population. The respondents in the study comprise a mix of local and international participants while a majority represented the higher middle-income (HMIC) population of Malaysia and 40.5% were Chinese Malaysians. In actuality, the majority of the population in Malaysia

are Malaysian Muslims. A larger and more heterogeneous sample would have improved generalizability.

3.2.5 Publication eight: Trends in substance use treatment in Malaysia

Publication eight is a discussion paper and review but with further planning, it could have been developed into a systematic review. The citations were up to date till 2018 and reflect the limited number of publications in regards to problematic substance use and treatment approaches in Malaysia. Publication eight is intended as a study of treatment programmes and how they have evolved in Malaysia. Findings are appropriate for policymakers and practitioners as it provides evidence of what would work within the psychosocial context of the Malaysian population. It addresses specific cultural needs and provides evidence relevant to Malaysian service user groups. A more thorough systematised review, such as a realist synthesis as suggested for publication one, may have broadened the scope of the limited evidence and strengthened the call made for locally produced primary studies.

3.3 Reflection of Objectives and Future Direction

The body of work presented here represents an exploration of the issues in applying evidence-based practice for problematic substance use that is appropriate for a SE Asian context. The publications demonstrate, initially, an exploration of models and

approaches to substance use treatment, a realisation of evidence gaps and need to respond to more holistic approaches, and then the creation of culturally specific evidence for practice. This work is part of the initiation of locally-generated evidence for practice in this field, providing building blocks for further research to align Malaysia's service provision with global standards while retaining local applicability.

The publications together can be seen to meet the objectives of this thesis fundamentally by the process of exploring evidence, identifying evidence gaps, applying interventions and evaluating the practice context. Publications one, two and three explore the current evidence and largely focus on the bio-medical (publications two and three) and psychosocial elements of treatment. It is understood that bio-medical treatment is applicable to SE Asia, but is a narrow and symptom-specific approach that is only one element of a holistic approach. Publication one demonstrates how little evidence was available in the SE Asian context at the time. The findings of the review provide evidence-based outcomes for social anxiety and relapse prevention with the integrated psychosocial treatment programme but are not generalizable to the local Singapore context, and arguably do not extend beyond a narrow, medicalized range of psychosocial issues. However, it evidences the lack of integrated psychosocial treatment programmes, while the failure of the SR methodology to address this practice issue thus suggests more inclusive review methods to be appropriate in discovering emerging evidence from different and innovative practice in LMICs.

The findings from the first four publications provide culture-sensitive evidence from SE Asia demonstrating cultural adaptation to deliver psychosociospiritual treatment effectively. As Gopalkrishnan (2018) and Tribe (2005) have illustrated, cultures have different means of viewing and seeking treatment and the Western model focuses on the individual's intrapsychic experience which is not always compatible with traditions based on community or family.

Publication eight argues for further evidence that is applicable to LMICs or SE Asia. The paper adds to identifying gaps in evidence and supports theories of difference in approach and the importance of cultural sensitivity for interventions. Findings from the paper present how treatment has evolved from the punitive method to a more psychosociospiritual approach. This has illustrated how treatment programmes have evolved in Malaysia. The findings evidenced the need for psychosociospiritual approaches which are not only culture-specific and non-Western based but also incorporate person-centred treatment approaches. Findings from this publication suggest how current treatment policy developments in Malaysia mirrors the Western substance use treatment policies from the last 20-30 years. Though this reflects the advancement in the treatment approaches in Malaysia towards a more recovery-oriented philosophy while conforming to global standards, the treatment approach relies mainly on Western-based sources. Publication eight identifies the need for future work to focus on evidence of person-centred treatment programmes, specifically to meet the psychosocial needs of the Malaysian population.

The critical analysis from the opinion papers two and three, along with the findings identified from publications six, seven and eight was an essential component in converting evidence-based findings into practice. It contributed to the recognition of the theoretical background of problematic substance use and the practical application of the psychological, social and spiritual components in our development of scholarship and academia while taking into consideration services in SE Asia. With this newfound theoretical appreciation of the evidence-to-practice cycle, and the practical experiences I gained from working with clients from various backgrounds, I aim to conduct further work to address the gap between research and practice while converting scientific findings into clinical practice. The publications were intentionally disseminated via selected journals such as Journal of Substance Use, Counselling Australia and Intervene to support the clinical and research communities in SE Asia to be part of this effort of modernization.

3.3.1 Evidence for Practice

In addition to the stated objectives for this thesis, this body of work also represents the evidence-to-practice cycle. This thesis illustrates an interchange of theory, clinical evidence, innovative intervention and evaluation, and my practice development to add to the body of knowledge relating to evidence for practice. This relates to evidence generation, where I am employing the evidence as a practitioner, and producing evidence from clinical practice, so it is not just about creating theory but also testing in the field. Therefore, based on the suggestions and findings, in order to

identify evidence-based psychosocial integrated treatment approach, evidence needs to be within a context of caring as suggested by Melnyk and Fineout-Overholt (2005). This thesis suggests employing the cycle of evidence production and combining it with practice in three ways: (i) producing primary evidence in the context of SE Asia and evaluating psychosociospiritual treatment programmes, (ii) reviewing existing evidence applicable to LMICs through inclusive methods (i.e. realist synthesis) and (iii) developing and evaluating a model that facilitates cultural adaptation addressing the psychosocial and spiritual aspects of need.

3.3.2 Addressing the family in substance use

A driving concern throughout the production of this body of work has been the desire to address the family as part of the environment of problematic substance use. In reporting my findings, I conclude that there is a lack of evidence for the application of adapted approaches to the psychosociospiritual model that accommodates the family and social culture. I propose that in order to fill this gap, further evidence needs to be produced and reviewed that looks at the effect of families on substance use; some areas may be factors such as family contact, discussions, problem-solving and re-initiating helpful family dynamics on motivation and behaviour change. This evidence would be relevant not only to LMICs but also contribute an important element to problem substance use in Western societies that may currently be overlooked in the field. Western countries can learn from LMICs and adapt strategies (such as mindfulness) for Western interventions. Work on family dynamics as an aspect of

supporting abstinence could also provide evidence for Western substance use treatment.

Publications six, seven and eight present the theories to support a focus on the family and its influences and how family-based interventions, parenting style, and socialization at home influences addictive behaviour and treatment approaches. The literature reviews and discussions present findings on the effectiveness of family-based interventions and that there is sufficient evidence to demonstrate the effectiveness of family-based interventions in the improvement of substance use-related, and relationship-related, outcomes. I suggest a review of family effects taking into consideration the psychosocial and cultural influences, mainly on other behavioural challenges such as domestic violence, to see if the evidence is transferable to problematic substance use. I intend to embark on conducting a review of published literature on family programmes employing psychosocial treatment approaches in Malaysia and South East Asia incorporating an extensive inclusion and exclusion criteria in order to reveal wider evidence in support of family interventions.

3.3.3 Culturally Sensitive Approaches for Substance Use

In considering the evidence-to-practice cycle in the context of Malaysia, it became clear that existing evidence for treatment approaches, and the theories supporting interventions, are culturally biased towards Western and individualistic philosophies of health and disease. Reflecting on the production of this evidence

included in this thesis reveals the extent to which Malaysia and other LMICs rely on evidence that is culturally inappropriate. The development of focus on psychosocial approaches from the West exacerbates this cultural divide as this element of health and wellbeing is more culturally specific than the bio-medical model. It is clear from my reviews that there is a gap in the evidence for the effectiveness of psychosociospiritual approaches in non-Western contexts when it comes to the treatment of problem substance use. There were no studies identified which reported evidence-based outcomes of psychosocial treatment programmes on either relapse prevention or reduction in the levels of social anxiety, and lack of evidence to identify a culturally derived psychosocial treatment programme in SE Asia. There appears to be limited evidence currently to support a psychosociospiritual treatment programme in a non-Western context, with only nascent evidence emerging in Malaysia, as reported in publications seven and eight. Therefore, there is a need to explore further how psychosociospiritual approaches can be developed to be culturally sensitive in non-Western contexts. The workbook developed for family members is an extension and part of the evidence gathering and theory-testing around cultural sensitivity in support of including family interventions in treating problematic substance use. I intend to further the evidence with a follow-up study to examine for continued effects from the workbook following family interventions.

3.3.4 Recovery Model and Global Mental health

This thesis also demonstrates the need to focus on the recovery model in LMICs and develop services and policy away from the prevalent paternalistic culture within the psychiatric and medical profession. Jacob (2015) explained this culture as ignoring patients' viewpoints while dismissing their objections. The recovery model stems from the phenomenological view of illness and health instead of the medico-biological deficit views of mental health illnesses, such as 'substance misuse', but is also supported by empirical evidence of long-term recovery in LMICs where Western psychiatric interventions were not dominant (Piat & Sabetti, 2009). Webb (2011) explains the term 'recovery' as being widely accepted among UK health service policy makers, especially in treatment of problematic substance use, while stressing the need for recovery principles to be customised to individual values. The research objectives of this thesis focus on identifying culture-specific treatment approaches employing a psychosocial approach incorporating family treatment models for LMICs mainly the SE Asian context. Findings from this body of work and proposed future research can be replicated with Western populations as well as SE Asia, with this recovery model becoming the ingredients for developing globally applicable treatment programmes for substance misuse treatment.

Bennet and Halloway (2010) express concerns in developing problem substance use treatment programmes by government stakeholders and policy makers because the outcomes for treatment programmes are based on reductions in reoffending, which is

not primarily the focus of the more holistic recovery model. This thesis suggests studies to employ a narrative review approach of EBP that incorporates evidence from end user perspectives, while the findings are disseminated to both academics and practitioners. Webb (2011) explains the current EBP approach as favouring the bio-medical positivist views which contradicts the recovery model. Findings from this research indicate interventions to focus on the process of engaging individuals and promoting holistic recovery as well as medical treatment outcomes, especially when evidencing wider contexts of problem substance use and producing evidence for policy and practice.

3.4 Summary

In conclusion, my work suggests that there is a need for further research in substance use treatment in the SE Asia region. Future research needs to be relevant to SE Asian cultures and focus on identifying more primary evidence generated from examples of good practice in clinical settings; 'what works' in practical application for psychosociospiritual programmes and, additionally, qualitative evidence to ascertain why the different elements are effective. Staley, Kabir and Szmukler (2013) emphasize the importance of service user and carer involvement in clinical research for producing outcomes that meet patients' needs. Service user participation helps improve not only the credibility of the findings, design and quality but also the dissemination of the findings (Vale et al., 2012). Patient and public involvement (PPI) is increasingly valued in Europe currently to ensure that we are from the outset asking the right questions in research (Ennis & Wykes, 2013). Tait and Lester (2005) explained that patients who are

involved in the research personally benefit as well by encouraging social inclusion and increasing a sense of well-being for the participants.

The main contribution of this thesis is the dissemination of practice evidence to practitioners supporting EBP while linking theory, practice, practice innovation and implementation. The publications presented in conferences, published in journals accessible to academics, clinicians and the general public has helped generate interest and fed into the evidence-based practice cycle.

I believe I have started the innovation process in SE Asia by accessing Western evidence, applied it to the SE Asia context, evaluated the adaptations for cultural sensitivity and disseminated the findings for the further development of evidence-based practice in SE Asia. This work also has an impact in Western practice settings as there is a growing need for culturally diverse practice due to the multicultural nature of many Western communities. Therefore, this thesis also further contributes to improved understanding of meeting holistic needs in Western contexts.

4.0 References

Abdullah, N. (2005). Exploring Constructions of the 'Drug Problem' In historical and Contemporary Singapore. *New Zealand Journal of Asian Studies, 7*(2):40-70.

Adam, F., Ahmad, W. I., W. & Fatah, S., A. (2011). Spiritual and Traditional Rehabilitation Modality of Drug Addiction in Malaysia. *International Journal of Humanities and Social Science. 1*I14):175-181.

Adams, P.J. (2008). *Fragmented intimacy: Addiction in a social world*. New York: Springer.

Akram, Y., Copello, A. & Moore, D. (2014). Family – based interventions for substance misuse: a systematic review of reviews. *Systematic Reviews, 3*:90

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders: DSM-5*. Washington, D.C: American Psychiatric Association.

Amon, J. J., Pearshouse, R., Cohen, J. & Schleifer, R. (2013). Compulsory drug detention centers in China, Cambodia, Vietnam, and Laos: Health and human rights abuses*. Health and Human Rights, 15*(2): 124-137.

Arendt, H. (1958). *The Human Condition*. Chicago: The University of Chicago Press. ISBN:0-226-02599-3.

Awde, N. (2009). The Influence of Cultural Values On The Parent-Child Interaction Patterns of Families From An Asian Background, *ARECLS, 6:* 01-17.

Azmi, A. A., Hussin, H., Ishak, S. I. D. & Daud, N. S. (2018). Drug Addicts: Psychosocial Factors Contributing to Relapse. MATEC Web of Conferences 150: 0509. DOI: https://doi.org/10.1051/matecconf/201815005097
Viewed on 8 July 2019 https://www.matec-conferences.org/articles/matecconf/abs/2018/09/matecconf_mucet2018_05097/matecconf_mucet2018_05097.html

Baharudin, D., Hussin, A., sumari, M., Mohamed, S. Zakaria, M, & Sawai, R. (2019). Intervention for the treatment and rehabilitation of drug addiction: an exploratory study. *Journal of substance Use Early Online*, 1-6. Doi: 10.3109/14659891.2013.799239

Beckwith, P. M. (2014). Mindfulness and Mandalas: Alternative Therapeutic Techniques for AOD Adolescents. *Epistimi, Capitol University's Undergraduate Research Journal.*

Bennett T. & Holloway K. (2010). Is UK drug policy evidence based? International *Journal of Drug Policy 21*(6): 411–417.

Berg, H. (2019) Evidence-Based Practice in Psychology Fails to BeTripartite: A conceptual Critique of the Scientocentrism in Evidence-Based Practice in Psychology. Frontiers in Psychology. 10:2253. doi: 10.3389/fpsyg.2019.02253

Best, D. & Lubman, D. (2012). The Recovery Paradigm. *Australian Family Physician*. *41* (8): 593 – 597.

Boon, T. O. (2006). *Slaying The Dragon: Singapore's Fight Against Drugs.* Ministry of Home Affairs, Singapore: SNP editions.

Bradshaw, J. (1996). *The Family: A New Way of Creating Solid Self Esteem. Health Communication*: Deerfield Beach, Florida.

Buchalter, S. (2013). *Mandala symbolism and techniques: Innovative approaches for professionals.* Philadelphia, PA: Jessica Kingsley Publishers.

Burns, J. K. (2012). The social determinants of schizophrenia: An African journey in social epidemiology. *Public Health Reviews. Advance online publication*. Retrieved from http://www. publichealthreviews.eu/show/f/114

Campbell Collaboration (2001). *Campbell Collaboration guidelines.* Retrieved February 14, 2006 from www.campbellcollaboration.org.

Canadian Institutes of Health Research (2013). *Knowledge Translation. Knowledge Translation*; Retrieved February 2014, from http://www.cihr-irsc.gc.ca/e/39033.html.

Carlson, Neil R. (2010). *Psychology The Science of Behaviour.* Pearson Canada. p. 409. ISBN 978-0-205-69918-6

Carnes, P. (1997). *The Betrayal Bond: breaking free of exploitive relationships*. Florida: Health Communications, Inc.

Carr, S (2018) Implementing sustainable global mental health in a fragmenting world. *The Lancet*, Vol. 392, No. 10157http://dx.doi.org/10.1016/ S0140-6736(18)32270-0

Chen, G. (2006). Social Support, Spiritual Program and Addiction Recovery. *International Journal of Offender Therapy and Comparative Criminology 50* (3). DOI: https://doi.org/10.1177/0306624X05279038

Chen, W. W., Yan, J. J. & Chen, C., C. (2018). Lesson of emotions in the family: The role of emotional intelligence in the relation between filial piety and life satisfaction among Taiwanese college students. *Asian Journal of Social Psychology, 21,* 74-82. DOI: 10.1111/ajsp.12207.

Christo, G., & Franey, C. (1995). Drug users' spiritual beliefs, locus of control and the disease concept in relation to Narcotics Anonymous attendance and six-month outcomes. *Drug and Alcohol Dependence, 38*(1), 51-56.

Clinical Guidelines on Drug Misuse and Dependence Update 2017 Independent Expert Working Group (2017). *Drug misuse and dependence: UK guidelines on clinical management*. London: Department of Health.

Cloud W. & Granfield R. (2008). Conceptualizing recovery capital: expansion of a theoretical construct. Su*bstance Use Misuse, 43*:1971–86.

Copello, A. G., Velleman, R. D. B., & Templeton, L. J. (2005) Family interventions in the treatment of alcohol and drug problems, *Drug and Alcohol Review, 24*(4), 369-385, DOI: 10.1080/09595230500302356

Cook, C. (2004). Addiction and spirituality. *Addiction*, *99*(5), 539-551.

Cooper, K., Chatters, R., Kaltenthaler, E. and Wong, R. (2015) Psychological and psychosocial interventions for cannabis cessation in adults: A systematic review short report. *Health Technology Assessment*, 9(56), pp. 1–130.

Cox, N. & Webb, L. (2015). Poles apart: does the export of mental health expertise from the Global North to the Global South represent a neutral relocation of knowledge and practice? *Sociology of Health & Illness, 0* (0): 1-5.

Cuellar, I., Arnold, B. & Gonzalez, G. (1995). Cognitive referents of acculturation: Assessment of cultural constructs in Mexican Americans. *Journal of Community Psychology, 23*, 339-356.

Delanty, G. (1997). *Social Science: beyond constructivism and realism.* Buckingham: Open University Press.

Dell, C. A., Seguin, M., Hopkins, C., Tempier, R., Mehl-Madrona, L., Dell, D., Duncan, R., & Mosier, K. (2011). From benzos to berries: treatment offered at an Aboriginal youth solvent abuse treatment centre relays the importance of culture. *Canadian Journal of Psychiatry*, 56:75–83.

Degenhardt, L., Bucello, C., Calabria, B., Nelson, P., Roberts, A., Hall, W., Lynskey, M., Wiessing, L. & The GBD illicit drug use writing group. (2011). What data are available on the extent of illicit drug use and dependence globally? Results of four systematic reviews. *Drug & Alcohol Dependence*, 117:85e101.

EMCDDA (2014). *Multidimensional family therapy for adolescent drug users: a systematic review.* EMCDDA Papers, Publications Office of the European Union, Luxembourg.

Ennis, L., & Wykes, T. (2013). Impact of patient involvement in mental health research: longitudinal study. *The British Journal of Psychiatry, 203*: 381-386. Doi: 10.1192/bjp.bp.112.119818.

Evans, D. (2003). Hierarchy of evidence: a framework for ranking evidence evaluating healthcare interventions. *Journal of Clinical Nursing, 12,* 77-84

Fernando, S. (2014). Globalization of psychiatry – A barrier to mental health development. *International Reviews in Psychiatry*: *26*:551–7. doi: 10.3109/09540261.2014.920305

Fincher, S. F. (2014). *The Mini Mandala Coloring Book*. Boston, Massachusetts: Shambhala Publications. ISBN 978-1-61180-176-7.

Fiske, A. P., Kitayama, S., Markus, H. R. & Nisbett, R. E. (1998). The cultural matrix of social psychology. *In*: D. T. Gilbert and S. T. Fiske, Eds. *The handbook of social psychology, Vol. II.* 4th ed. New York: McGraw-Hill, 915–981.

Fontana, D. (2005). *Meditating with mandalas: 52 new mandalas to help you grow in peace and awareness*. London: Duncan Baird. ISBN 1844830543.

Giddens, A., (1997). *Sociology*. 3rd ed. Cambridge: Polity Press.

Gittelman, R., Mannuzza, S., Shenker, R. & Bonagura, N. (1985). Hyperactive boys almost grown up: 1. Psychiatric status. *Archives of General Psychiatry, 42*:937 – 47.

Gopalkrishnan, N. (2018). Cultural Diversity and Mental Health: Considerations for Policy and Practice. *Frontiers in Public Health, 6*; 179. doi: 10.3389/fpubh.2018.00179

Grant, M.J., Booth, A., A. (2009). Typology of reviews: an analysis of 14 review types and associated methodologies. *Health Info Libr J, 26:*91–108. http://onlinelibrary.wiley.com/doi/10.1111/j.1471-1842.2009.00848.x/full

Groshkova, T., Best, D. & White, W. (2013). The Assessment of Recovery Capital: Properties and Psychometrics of a measure of addiction recovery strengths. *Journal of Drug and Alcohol Review, 32,* 187-194.DOI: 10.1111/j.1465-3362.2012.00489.x

Hall, D. H., & Queener, J. E. (2007). Self – Medication Hypothesis of Substance Use: Testing Khantzian's Update Theory. *Journal of Psychoactive Drugs. 39*(2):151.

Hankerson S. H., & Weissman M. M. (2012). Church-based health programs for mental disorders among African Americans: A review. *Psychiatric Services*, *63*: 243-249.

Hari, J. (2015). *"Chasing the Scream: The First and Last Days of the War on Drugs."* Bloomsbury: New York.

Harrington, A. (2005). *Modern Social Theory. An Introduction. What is Social Theory?* Oxford University Press.

Horvath, T., A., Misra, K., Epner, A., K. & Cooper, M, G. (2016) .*Sociocultural Model of Addiction and Recovery implications.* Retrieved December 3, from, https://www.mentalhelp.net/articles/sociocultural-model-of-addiction-and-recovery-implications/

Ibrahim, F. & Kumar, N. (2009). The influence of Community on Relapse Addiction to Drug use: Evidence from Malaysia. *European Journal of Social Sciences. 11*(3): 471-476.

Informal Drug Policy Dialogue Report (2018). *The 9th Asian Informal Drug policy Report.* Transnational Institute. Accessed on February 23, 2020. https://www.aidsdatahub.org/9th-asian-informal-drug-policy-dialogue-transnational-institute-2018

Jacob, K. S. (2015). Recovery Model of Mental Illness: A Complementary Approach to Psychiatric Care. *Indian Journal of Psychological Medicine, 37*(2):117-119, DOI: 10.4103/0253-7176.155605

Jayde A. M., Flett, Lie, C., Riordan, B. C., Thompson, L. M., Conner, T. S. & Hayne, H. (2017). Sharpen Your Pencils: Preliminary Evidence that Adult Coloring Reduces Depressive Symptoms and Anxiety, *Creativity Research Journal, 29*:4, 409-416, DOI: 10.1080/10400419.2017.1376505

Jesse D. E., Graham M., & Swanson M. (2006). Psychosocial and spiritual factors associated with smoking and substance use during pregnancy in African American and White low-income women. *Journal of Obstetric Gynecology Neonatal Nursing, 35*: 68-77.

Joas, H. & Knobi, W. (2009). *Social Theory. Twenty Introductory Lectures.* Cambridge: Cambridge University Press. ISBN: 9780521870634

Jung, C. G. (1969). Phenomenology of the spirit in fairy tales (R. F. C. Hull, Trans.). In H. Read et al. (Series Eds.), *The collected works of C.G. Jung* (Vol. 9 pt. 1, 2nd. ed., pp. 207-254). Princeton, NJ: Princeton University Press. (Original work published 1948).

Kaskutas, L.A., Turk, N., Bond, J., & Weisner, C. (2003). The role of religion, spirituality and Alcoholics Anonymous in sustained sobriety. *Alcoholism Treatment Quarterly*, *21*(1), 1-16.

Khan, F., Krishnan, A., Ghani, M. A., Wickersham, J. A., Fu, J. J., Lim, S. H., Dhaliwal, S. K., Kamarulzaman, A. & Altice, F. L. (2018). Assessment of an Innovative Voluntary Substance Abuse Treatment Program Designed to Replace Compulsory Drug Detention Centers in Malaysia. *Substance Use and Misuse, 53(2):* 249-259. DOI 10.1080/10826084.2016.1267217.

Kirkevold, M. (1997). Integrative nursing research - an important strategy to further the development of nursing science and Practice. *Journal of Advanced Nursing. 25,* 977-984*.*

Kleinman, A. (1995). Do psychiatric disorders differ in different cultures? The methodological questions. In: Veroff J, Goldberger N, eds. *The culture and psychology reader*. New York: New York University Press, 631-51.

Laudet, A. B, Morgen, K. & White, W., L. (2006). The Role of Social Supports, Spirituality, Religiousness, Life Meaning and Affiliation with 12-Step Fellowships in Quality of Life Satisfaction Among Individuals in Recovery from Alcohol and Drug Problems*. Alcohol Treatment Quarterly.; 24*(1-2): 33–73.

Lefever, R. (2000). *Kick the Habit. From Acceptance to Recovery.* London, Wellbeck Publishing.

MacLure, M. (2005). 'Clarity bordering on stupidity': where's the quality in systematic review? J*ournal of Education Policy*, 20(4), 93-416**.**

Mallett, R., Hagen-Zanker, J., Slater, R., & Duvendack, M. (2012). The benefits and challenges of using systematic reviews in international development research. *Journal of Development Effectiveness, 4*(3), 445-455.

Mantzios, M. & Giannou, K. (2018). When Did Coloring Books Become Mindful? Exploring the Effectiveness of a Novel Method of Mindfulness-Guided Instructions for Coloring Books to Increase Mindfulness and Decrease Anxiety. *Frontiers in Psychology, 9*:56. doi: 10.3389/fpsyg.2018.00056

Marlatt G. A. & Gordon J. R. (1985). *Relapse Prevention: Maintenance strategies in the Treatment of Addictive Behaviors*. Guilford Press: New York.

Mate, G. (2011). *In the Realm of Hungry Ghosts; Close Encounters with Addiction.* Canada: Knopf Canada.

McCrady, B., S., Epstein, E., E. & Sell, R., D. (2003). Theoretical basis of family approaches to substance abuse treatment. In F. Rotgers., J., Morgenstern, & S. T. Walters (Eds.), *Treating substance abusers: Theory and technique* (2nd ed., pp. 112-139). New York: Guilford Press.

McLellan, A. T., McKay, J. R., Forman, R., Cacciola, J.& Kemp, K. (2005). Reconsidering the evaluation of addiction treatment: from retrospective follow-up to concurrent recovery monitoring. *Society for the Study of Addiction, 100,* 447-458. doi: 10.1111/j.1360-0443.2005.01012.x

Mellody, P., Miller, A. W. & Miller, J. K. (2003). *Facing Codependence. What is It, Where It Comes From, How it Sabotages Our Lives*, Harper Collins Publishers: New York.

Melnyk, B. & Fineout-Overholt, E. (2005). *Evidence- based practice in nursing and healthcare: A guide to best practice* (pp. 39 – 70). Philadelphia: Lippincott, Williams & Wilkins.

Marcus, M. & Zgierska, A. (Eds.). (2012). *Mindfulness-related treatments and addiction recovery*. New York, NY: Routledge.

Miller, W. R., & Carroll, K. M. (2006). *Rethinking Substance Abuse; What The Science Shows, and What We Should Do about it.* New York: Guilford.

Miller, W. (2013). Addiction and Spirituality. *Journal Substance Use and Misuse, 48*(12), 1258-1259.

Mills, A. (2014). Health care systems in low- and middle-income countries. *The New England Journal of medicine, 370*(6), 552-7.

Mold, A. & Berridge, V. (2010). *Voluntary action and illegal drugs: Health and society in Britain since the 1960s*. Basingstoke, UK: Palgrave Macmillan.
Neale, J., Pickering, L. & Nettleton, S. (2012). *The everyday lives of recovering heroin users.* London: Royal Society of Arts.

NIDA (National Institute on Drug Abuse). (1997). Preventing Drug Use Among Children and Adolescents: a research- based guide. *National Institute of Health Publication* No. 97-4212.

Oppong, S. H. (2013). The problem of sampling in qualitative research. *Asian Journal of Management Sciences and Education*, 1-9.

Orford, J., Velleman, R., Natera, G., Templeton, L. & Copello, A. (2013). Addiction in the family is a major but neglected contributor to the global burden of adult ill-health. *Social Science & Medicine, 78*, 70–77.

Orr, D. & Jain, S. (2014). Making space for embedded knowledge in Global Mental Health: a role for social work? *European Journal of Social Work.* 18:4, 569-582.

Patton, M. Q. (2002). *Qualitative research and evaluation methods 3rd ed*. Thousand Oaks, CA: Sage.

Pawson, R. (2003). Nothing as practical as a good theory. *Evaluation*, *9:*471–490.

Peh, A. L., Lim, Y. C. & Winslow, R. M. (2012). Addictions in Singapore: Changing patterns and evolving challenges. *Singapore Medical Journal, 53*(7): 435-437.

Piat, M. & Sabetti, J. (2009). The Development of a Recovery-Oriented Mental Health System in Canada: What the Experience of Commonwealth Countries Tells Us. *Canadian Journal of Community Mental Health*, 15; 28(2): 17–33. doi:10.7870/cjcmh-2009-0020.

Quay, H. (1987). Handbook of Juvenile Delinquency. New York: Wiley.

Quine, W. V. & Ullian, J. S. (1980). Hypothesis. In: Klempe, E.D., Hollinger, R., David Kline, A. Ž. Eds. *Introductory Readings in the Philosophy of Science.* Prometheus Books, Buffalo, New York.

Razak, A., Ab. (2017). Cultural construction of psychiatric illness in Malaysia. Malaysian *Journal of Medical Science*, *24*(2):1–5.

Robins, L. N. & McEvoy, L. (1990). *Conduct problems as predictors of substance abuse.* In: LN Robins and M Rutter, eds. Straight and devious pathways from childhood to adult- hood. Cambridge, England: Cambridge University Press.

Reid, G., Kamarulzaman, A. & Sran, S. K. (2007). Malaysia and harm reduction: The challenges and responses. *International Journal of Drug Policy, 18*(2), 136–140. http://dx.doi.org/10.1016/j.drugpo.2006.12.015, pii:S0955-3959(06)00261-1

Rusdi, A. R., Noor, Z., Muhammad, M. A. Z. & Muhammad, H. H. (2008). A Fifty-Year Challenge in Managing Drug Addiction in Malaysia. *Journal of the University of Malaya Medical Centre,11*(1), 3-7.

Rycroft-Malone, J. McCormack, B., Hutchinson, A., M., DeCorby, K., Bucknall, T., K., Kent, B., Schultz, A., Snelgrove-Clarke, E., Stetler, C., B., Titler, M., Wallin, L. (2012). Realist synthesis: Illustrating the method for implementation research. *Journal of Implementation Science,7*(33), 1;10.

Salem, M., O. & Ali, M., M. (2008). Psycho-Spiritual Strategies in Treating Addiction Patients: Experience at Al-Amal Hospital, Saudi Arabia. *Journal of the Islamic Medical Association of North America,* 40(4):161.

Saxena, S. (2006). Conclusion. In: Disease Control Priorities Related to Mental, Neurological, Developmental and Substance Abuse Disorders, Vol. 10. Geneva: World Health Organization; 2006:101e3.

Smedslund, G., Berg, R. C., Hammerstrom, K, T., Steiro, A., Leiknes, K. A., Dahl, H. M. & Karlsen, K. (2011). Motivational interviewing for substance abuse (Review), *Cochrane Database of Systematic Reviews* , Issue 5. Art. No.: CD008063. DOI: 10.1002/14651858.CD008063.pub2.

Scheyett, A., DeLuca, J., & Morgan, C. (2013). Recovery in severe mental illnesses: A literature review of recovery measures. *Social Work Research: A Journal of the National Association of Social Workers, 37,* 286–303.

Seligman, M. E. P. (1975). *Helplessness: On Depressions, Development and Death.* San Francisco: W. H. Freeman. ISBN 0-7167-2328-X.

Shanmugam, P. K. (2015) The Family – Responding to A Disease of Emotions. *Intervene Magazine*.

Shanmugam, P. K., (2019). Exploring trends and challenges from mandated treatment to voluntary treatment outcomes in addiction treatment in Malaysia: moving toward a person-centered service provision. *Journal of Substance Use, DOI: 10.1080/14659891.2019.1664669*

Skewes, M., C. & Gonzalez, V., M. (2013). The Biopsychosocial Model of Addiction. In Miller, P., M. (Ed), *In Principles of Addiction. Comprehensive Addictive Behaviors and Disorders Volume 1.* Retrieved from https://doi.org/10.1016/B978-0-12-398336-7.00006-1

Staley, K., Kabir, T., & Szmukler. (2013). Service users as collaborators in mental health research : less stick and more carrot. *Psychological Medicine, 43*: 1121-1125. Doi: 0.1017/S0033291712001663

Stevens, P., & Smith, R., L. (2005). *Substance Abuse Counselling; Theory and Practice* (3rd ed.). Upper Saddle River, NJ: Prentice-Hall.

Summerfield, D. (2008). How scientifically valid is the knowledge base of global mental health? *BMJ, 336*: 992-994.

Tait, L., & Lester, H. (2005). Encouraging user involvement in mental health services. *Advanced Psychiatric Treatment, 11*: 168–75.

Tanguay, P., Kamarulzaman, A., Aramrattana, A., Wodak, A., Thomson, N., Ali, R., & Chabungbam, A. (2015). Facilitating a transition from compulsory detention of people who use drugs towards voluntary community-based drug dependence treatment and support services in Asia. *Harm Reduction Journal,* 12:31.doi: 10.1186/s12954-015-0071-0 [PubMed: 26470779]

Tribe, R. (2005). The mental health needs of refugees and asylum seekers. *Mental Health Review.* 10:8–15. doi: 10.1108/13619322200500033

Tseng, W. (2004). Culture and psychotherapy: Asian perspectives. *Journal of mental health, 132*, 151–161.

Tucker, J. A. & Roth, D., L. (2006). Extending the evidence hierarchy to enhance evidence-based practice for substance use disorders. *Addiction 101(7*): 918–932.

Turner, L. (2004). Bioethics in pluralistic societies. *Medical Health Care Philosophy, 7*: 201-8.

Unger, J. B., Ritt - Olson, A., Teran, L., Huang, T., Hoffman, B. R. & Palmer, P. (2002). Cultural values and substance use in a multi-ethnic sample of California adolescents, *Addiction Research & Theory, 10*:3, 257-279, DOI: 10.1080/16066350211869

Vale, C., L., Thompson, L., C., Murphy, C., Forcat, S., & Hanley, B. (2012). *Involvement of consumers in studies run by the Medical Research Council Clinical Trials Unit: results of a survey*. Trials 13, 9.
http:// www.trialsjournal.com/content/13/1/9

Velleman, R. D. B., Templeton, L. J. & Copello, A. G. (2005). The role of the family in preventing and intervening with substance use and misuse: a comprehensive review of family interventions, with a focus on young people. *Drug and Alcohol Review, 24*: 93-109.

Vigil, D., C. (2002). Cultural variations in attention regulation: a comparative analysis of British and Chinese-immigrant populations. *International Journal of Language and Communication Disorders, 37* (4), 433–458.

Wacker, J. G. (1998). A definition of theory: research guidelines for different theory-building research methods in operations management. *Journal of Operations Management*. *16*(1998): 361-385.

Walliman, N. (2011). *Research Methods: The Basics.* New York: Routledge Taylor & Francis.

Weinberg, D. (2002). On the Embodiment of Addiction. *Body & Science, 8(4), 1-19.*

Webb, L. (2011). The recovery model and complex health needs: What health psychology can learn from mental health and substance misuse service provision. *Journal of Health Psychology 17*(5):731-41. DOI: 10.1177/1359105311425276

Werb, D., Kamarulzaman, A., Meacham, M. C., Rafful, C., Fischer, B., Strathdee, S. A. & Wood, E. (2016). The effectiveness of compulsory drug treatment: A systematic review. *International Journal of Drug Policy, 28*: 1-9.

White, W. (1992). Spirituality: Its language and boundaries. In *Spirituality and Prevention* (pp. 37-47). Springfield, IL: Illinois Prevention Resource Center.

White, W. L. (1998). *Slaying the dragon: the history of addiction treatment and recovery*. Chestnut Health Systems Publication. USA

White, W. & Kurtz, E. (2005). *The Varieties of Recovery Experience*. Chicago, IL: Great Lakes Addiction Technology Transfer Center.

World Health Organization (2008). *Principles of Drug Dependence Treatment*. UN/WHO, Geneva.

World Health Organisation (2011). *Mental health atlas 2011*. Retrieved August 14, 2013, from http://www.who.int/mental_health/publications/mental_health_atlas_2011/en/

World Health Organization (2019). *Sustainable Developmental Goals (SDGs).* Retrieved from https://www.who.int/sdg/en/

Yeh, K. H. & Bedford, O. (2003). A test of the dual filial piety model. *Asian Journal of Social Psychology, 6,* 215–228.

Yoshikawa, H. (1994). Prevention as cumulative protection: Effects of early family support and education on chronic delinquency and its risks. *Psychological Bulletin*;*115*:28 – 54.

Yoshimasu, K. (2013). Psychosocial Factors Associated with Substance- Related Disorders; Three Stratified Dimensions. *Journal of Addiction Research and Therapy S6*:006. doi:10.4172/2155-6105.S6-006

Young, M., DeLorenzi, L. & Cunningham, L. (2011). Using meditation in addiction counseling. *Journal of Addictions and Offender Counseling,* 32.

Yuan, Y. & Hunt, R., H. (2009). Systematic Reviews: The Good, the Bad and the Ugly. *The American Journal of Gastroenterology, 104*(5):1086-92. DOI:10.1038/ajg.2009.118

Zubir, Y. H. (2019). Government to decriminalize drug possession for personal use. *New Straits Times,* Retrieved from: www.nst.com.my/news/nation/2019/06/499873/govt-decriminalise-drug-possession-personal-use

APPENDIX A

List of conferences presented

- Mental Health and Addiction Conference, Kuala Lumpur October 2016.
- 4th Asia Pacific Behavioral and Addiction Medicine (APBAM) Conference, Kota Kinabalu, Malaysia. September 2016.
- 7TH ASCAD International Conference and Workshop in Melaka, Malaysia.
- 7th International Conference on Addictive Disorders and Alcoholism – Kuala Lumpur, July 2017.
- ICAAD 2017 - International Conference on Addiction and Associated Disorders, London, United Kingdom. May 2017.
- Health in the City, Kuala Lumpur, 2017.
- 9th ISAM Annual Conference Addiction Medicine, New Frontier, Abu Dhabi, October 2017.
- 5th Asian Pacific International Psychotherapy and Counselling Conference, Singapore, Dec 2017.
- Erada International Addiction Conference, March 2018, Dubai, UAE.
- Drugs, Alcohol, Relationship Issues & Time Wastage Seminar, (D.A.R.T.S) – University of Malaya. April, 2018.

APPENDIX B

Programme Schedule

Solace Programme Weekly Schedule

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
08:00	Breakfast	Breakfast	Breakfast	Breakfast	Breakfast	Breakfast	Breakfast
9:15	Check-in	Check-in	Check-in	Check-in	Check-in	Check-in	Check-in
10:00	Peer Feedback Or Art Therapy	Interpersonal Therapy Group	- Introduction - Psycho-education	Music Therapy	Interpersonal Therapy Group	Leisure activity	Sports
							Leisure activity
12:00	Lunch	Lunch	Lunch	Lunch	Lunch	Lunch Out	Lunch
13:00	Peer Feedback	- Client Presentation - Step Work	- Client Presentation - Step Work	- Client Presentation - Step Work	- Client Presentation - Step Work	Leisure activity	Leisure activity
15:30	Sports	Sports	Sports	Sports	Sports		
18:00	Dinner	Dinner	Dinner	Dinner	Dinner	Dinner	Dinner
19:00	AAA	CODA	AA (Out)	Speaker-tape	Step Work Reading		NA (Out)
20:00	Check-out	Check-out	Check-in	Check-out	Check-out	Check-out	Check-out

APPENDIX C

Declaration of Contribution to publications

Acceptance letter for publication seven

From: dr_pates23@hotmail.com

To: premkumarshanmugam@yahoo.com, premkumar@solacesabah.com

Subject: Journal of Substance Use - Decision on Manuscript ID TJSU-2020-0093.R2

Body: 04-Aug-2020

Dear Mr Shanmugam:

Ref: Psychoeducation impact for family members of substance users: An evaluation the workbook "Addiction: A Family Disease".

Our referees have now considered your paper and have recommended publication in Journal of Substance Use. We are pleased to accept your paper in its current form which will now be forwarded to the publisher for copy editing and typesetting.
Accepted papers will be transmitted for production. The first and most important task for authors at that point will be to complete an online author agreement form. Please make sure you complete it as soon as you receive the publisher notice about it.

You will receive proofs for checking. The publisher requests that proofs are checked and returned within 48 hours of receipt.

Thank you for your contribution to Journal of Substance Use and we look forward to receiving further submissions from you.

Sincerely,
Prof. R. Pates
Editor in Chief, Journal of Substance Use
dr_pates23@hotmail.com

Acceptance letter for publication eight

From: dr_pates23@hotmail.com

To: premkumarshanmugam@yahoo.com, premkumar@solacesabah.com

Subject: Journal of Substance Use - Decision on Manuscript ID TJSU-2019-0061.R1

31-Aug-2019
Dear Mr Shanmugam:
Ref: Exploring trends and challenges from mandated treatment to voluntary treatment outcomes in addiction treatment in Malaysia: moving towards a person-centred service provision.

Our referees have now considered your paper and have recommended publication in Journal of Substance Use. We are pleased to accept your paper in its current form which will now be forwarded to the publisher for copy editing and typesetting. The reviewer comments are included at the bottom of this letter, along with those of the editor who coordinated the review of your paper.

Accepted papers will be transmitted for production. The first and most important task for authors at that point will be to complete an online author agreement form. Please make sure you complete it as soon as you receive the publisher notice about it.

You will receive proofs for checking. The publisher requests that proofs are checked and returned within 48 hours of receipt.

Thank you for your contribution to Journal of Substance Use and we look forward to receiving further submissions from you.
Sincerely,
Prof. R. Pates

Editor in Chief, Journal of Substance Use
dr_pates23@hotmail.com

Ethics approval for publication four

NANYANG TECHNOLOGICAL UNIVERSITY

Research Support Office

Reg. No. 200604393R

IRB 10/11/13 Amendment

21 March 2012

A/Prof Caroline Koh
National Institute of Education

NTU INSTITUTIONAL REVIEW BOARD APPROVAL
Project Title: Evaluation of The Facilitated Recovery Education Treatment Programme for Substance Abusers in Singapore

I refer to your application for ethics approval with respect to the above project.

The Board has deliberated on your application and accepted the change in:

1. Protocol
2. Start and end date
3. Research site

The Board is therefore satisfied with the bioethical considerations for the project and approves the ethics application.

Prof Lee Sing Kong,
Chair, NTU Institutional Review Board
encl.

cc Director, National Institute of Education
Members, NTU Institutional Review Board

Blk N2.1, B4-01, 76 Nanyang Drive, Singapore 637331 Nanyang Avenue, Singapore 639798
Tel : +65 6791 9857, Fax: 6793 2019
www.ntu.edu.sg

Ethics approval for publication seven

11/07/2019
Project Title: An evaluation study of the "Addiction Family Disease" book

EthOS Reference Number: 5880

Ethical Opinion

Dear Prem Kumar Shanmugam,

The above application was reviewed by the Health, Psychology and Social Care Research Ethics and Governance Committee and, on the 11/07/2019, was given a favourable ethical opinion. The approval is in place until 30/09/2019 .

Conditions of favourable ethical opinion

Application Documents

Document Type	File Name	Date	Version
Project Proposal	ETHOS proposal 21 May	21/05/2019	2
Information Sheet	PIS 21 May	21/05/2019	3
Consent Form	Consent Form 3 June	04/06/2019	2

The Health, Psychology and Social Care Research Ethics and Governance Committee favourable ethical opinion is granted with the following conditions

Adherence to Manchester Metropolitan University's Policies and procedures

This ethical approval is conditional on adherence to Manchester Metropolitan University's Policies, Procedures, guidance and Standard Operating procedures. These can be found on the Manchester Metropolitan University Research Ethics and Governance webpages.

Amendments

If you wish to make a change to this approved application, you will be required to submit an amendment. Please visit the Manchester Metropolitan University Research Ethics and Governance webpages or contact your Faculty research officer for advice around how to do this.

We wish you every success with your project.

HPSC Research Ethics and Governance Committee

RDPUB Publication One

Research and Knowledge Exchange

Graduate School

Form **RDPUB (ROUTE 1 AND 2)**

Manchester Metropolitan University

PhD BY PUBLISHED WORK (ROUTE 1/2): CONTRIBUTION TO PUBLICATIONS

This form is to accompany an application for registration for PhD where the PhD is by Published Work. A separate form should be completed for each publication that is submitted with the proposal and should accompany the RD1 form.

1. The Candidate			
First Name(s):	Prem Kumar Shanmugam	Preferred Title:	
Surname:	Shanmugam		
MMU e-mail address:	premkumarshanmugam@yahoo.com	Contact Number:	0060197154686
Personal e-mail address:	premkumarshanmugam@yahoo.com	Student ID Number:	17102003

2. Title of PhD Proposal

The Biopsychosociospiritual Model in Addiction Treatment: A critique of published work to date supporting its application in practice, and examination of the evidence-based practice role in changing the addiction treatment approach.

Title of Research Output

Integrated Psychosocial Treatment Programme for Substance Abusers: Relapse Prevention and Social Anxiety Diminution

3. Candidate's contribution to the research output
(State nature and approximate percentage contribution of each author)

Prem Kumar Shanmugam 80%
Dr Munidasa Winslow 20%

4. Co author(s):

I confirm that the contribution indicated above is an accurate assessment of the contribution by the candidate to the research output named in section 3.

Name	Signature	Current e-mail address
Munidasa Winslow		winslow@promises.com.sg

5. Statement by Director of Studies/Advisor

I confirm that I have read the above publication and am satisfied that the extent and nature of the candidate's contribution is as indicated in section 4 above.

Signature:	Lucy Webb	Date:	7.4.20
	(Director of Studies/Advisor)		

6. Signature of Faculty Research Degrees Administrator

Signature:	Dale Allen	Date:	09.04.2020
	(Faculty Research Degrees Administrator)		

RDPUB, version 1.0, 22/08/2014

RDPUB Publication Four

Research and Knowledge Exchange

Graduate School

Form **RDPUB (ROUTE 1 AND 2)**

Manchester Metropolitan University

PhD BY PUBLISHED WORK (ROUTE 1/2): CONTRIBUTION TO PUBLICATIONS

This form is to accompany an application for registration for PhD where the PhD is by Published Work. A separate form should be completed for each publication that is submitted with the proposal and should accompany the RD1 form.

1. The Candidate

First Name(s):	Prem Kumar Shanmugam	Preferred Title:	
Surname:	Shanmugam		
MMU e-mail address:	premkumarshanmugam@yahoo.com	Contact Number:	0060197154686
Personal e-mail address:	premkumarshanmugam@yahoo.com	Student ID Number:	17102003

2. Title of PhD Proposal

The Biopsychosociospiritual Model in Addiction Treatment: A critique of published work to date supporting its application in practice, and examination of the evidence-based practice role in changing the addiction treatment approach.

Title of Research Output

Evaluation of the Facilitated In-house Recovery Education (FIRE) Treatment Programme for Substance Abusers

3. Candidate's contribution to the research output

(State nature and approximate percentage contribution of each author)

Prem Kumar Shanmugam 80%
Dr Munidasa Winslow 20%

4. Co author(s):

I confirm that the contribution indicated above is an accurate assessment of the contribution by the candidate to the research output named in section 3.

Name	Signature	Current e-mail address
Munidasa Winslow	A/PROF MUNIDASA WINSLOW MBBS (S'pore), MMed (Psych), FAMS Senior Consultant Specialist in Psychiatry PROMISES HEALTHCARE	winslow@promises.com.sg

5. Statement by Director of Studies/Advisor

I confirm that I have read the above publication and am satisfied that the extent and nature of the candidate's contribution is as indicated in section 4 above.

Signature:	Lucy Webb	Date:	7.4.20
	(Director of Studies/Advisor)		

Dale Allen (Research Degrees Administrator) 09.04.2020

RDPUB, version 1.0, 22/08/2014